PER

The New York
Academy of Medicine



By Exchange

Illinois Medical Journal

THE OFFICIAL JOURNAL OF

The Illinois State Medical Society

INDEX TO VOLUME 89

JANUARY — JUNE, 1946

NEW YORK ACADEMY
OF MEDICINE
OCT -7 1946
LIBRARY
254902

INDEX TO VOLUME 89

Issue	*Pages*	*Issue*	*Pages*
January	1- 84	April	149-204
February	85-100	May	205-252
March	101-148	June	253-306

This index is arranged under the following headings: AUTHORS, CORRESPONDENCE, DEATHS, EDITORIALS, INDUSTRIAL HEALTH, MARRIAGES, MEDICAL ECONOMICS, MEDICINE'S ROLE IN THE WAR EFFORT, NEWS OF THE STATE, ORIGINAL ARTICLES, PHYSICAL MEDICINE ABSTRACTS, and STATE DEPARTMENT OF PUBLIC HEALTH.

Authors

Alt, Howard, 62
Andrews, Lt. Col. Sherman E., 288
Angres, Erwin, 133
Anthony, Capt. Paul K., 82
Arieff, Alex J., 74

Bellas, Joseph E., 116
Bothman, Louis, 124
Boyd, Richard F., 13, 55

Cameron, D. Ewen, 242
Carroll, Kenneth M., 121
Clark, S. N., 68
Coleman, Everett P., 267

Drueck, Charles J., 72

Farnum, Charles G., Jan. 64, Feb. 100, Mar. 58, April 204, May 54, June 54
Fishback, Hamilton R., 30
Fowler, Frank H., 30

Gowen, Lt. Col. G. Howard, 294
Greeley, Com. Paul W., 216

Hammond, Frank P., 291

Klapman, J. W., 226
Kretschmer, Herman L., 16

Limarzi, Louis, 62
Lubitz, Joseph M., 20

Nadelhoffer, Luella, 239

Oliver, Marguerite, 239

Parsons, Eloise, 239
Pearson, Emmett F., 221
Phillips, M. Alice, 239
Pound, Lt. Com. Albert E., 216

Raider, Major Joseph, 288
Ritch, C. Otis, 131
Roeser, Erwin H., 16

Scrivner, W. C., 19
Schwartz, Steven Otto, 62
Spiegel, I. Joshua, Major, 188
Strich, Arthur J., 25
Sugar, H. Saul, 234

Taylor, Samuel G., 296
Tice, Frederick, 280

Urkov, Joseph C., 75

Waddell, Wm. W., 234
Webster, Augusta, 239
Wessels, Marie, 11
Whittaker, Lorin D., 271
Woods, Ralph H, 276

Correspondence

Cancer Committees Merge 108
Clinical Congress of American College of Surgeons in New York, Plans Announced for 1946 167
Dieticians to Meet 109
Discontinuance of Federal Funds for Aid to Enemy Aliens and Others Affected by Governmental Action 215
Fifty Year Club Luncheon 263
Gastroenterological Association 1946 Award Contest 109
Goiter Study, Meeting for 107
International College of Surgeons Meets in Detroit, United States Chapter 168
Interstate Postgraduate Medical Associations of North America 61
Neuropsychiatry Training Offered 263
Pediatrics, Course in 109
Preceptorships 108
Program for the Care of Premature Infants 61
Refresher Courses at University of Illinois 167
Research Grants Renewed 168
Revised Examination Schedule 10
Southeastern Surgical Congress, The 10
Sugar and Treatment of Disease 168
Successful Staff Meetings Described 60
United Nations Relief and Rehabilitation Administration 108
U. S. Public Health Service Needs Physicians ...107
Urology Award 109

Deaths

Allyn, Walter H. 99
Anderson, Frank M. 256
Baker, Wm. Evan 148
Balcke, Louis 256
Ball, Amos W. 48
Bartlett, F. Herbert 203
Benedetto, Joseph Anthony 305
Bertling, Adolphus E. 99
Birk, John W. 48
Bishop, William H. 305
Black, Carl E. 99
Blackard, Wm. J. 256
Bloomfield, Mat 99
Bowes, Leon M. 99
Bradley, Edwin H. 99
Brown, Theodore W. 99
Caldwell, Delia 48
Churchill, Frank Spooner 203
Claeboe, Alfred H. 305
Clark, Charles C. 99
Collins 3rd, Lorin C. 99
Conn, Earl Gaines 148
Crandle, Eugene 148
Crowley, William 148
DeRoulet, Alfred 48
Dickerson, Mercer 48
Farrier, R. C. 48
Frank, Walter 48
Frick, Anders 305
Friedman, Herman J. 305
Goltz, Arthur 256
Griffin, L. M. 256
Gunn, Robert Marney 305
Hancock, W. A. 148
Harrell, W. D. 148
Hayes, K. L. 99
Herzman, M. H. 148
Hirsch, Joseph A. 256
Horner, David A. 203
Hoyt, Mary O. 203
Johnson, Frank O. 48
Johnson, William Logan 305
Karras, R. W. 48
Kemper, Malcolm A. 305
Lamb, Robert A. 148-203
Lambert, Richard J. 203
Lingard, Wm. 99
Loseff, Alvin S. 99
Lutyens, G. B. 148
Lyles, A. R. 99
Mauzey, George W. 99
Mercer, Wm. H. 148
Merrell, Henry H. 148
Miller, Sumner 48
McCord, Thomas Chester 148
McShane, Gerald 99
Nelson, James A. 305
Noerdlinger, Julius 148
O'Neil, John H. 99
Ostling, Carl A. 256
Percy, James Fulton 305
Pinter, Hiram Edgar 305
Port, Frederick J. 148
Puckett, A. C. 148
Read, Charles F. 203
Reinhardt, Charles O. 256
Rice, E. V. 99
Rudnick, Fred 99
Saling, William J. 306
Scott, Charles 148
Smith, Charles G. 306
Smith, E. M. 256
Smith, Frederick J. 203
Sprafka, Raphael Raymond 203
Sutter, John R. 48
Tabenski, Longin• 148
Tackett, Walton 99
Thomson, T. H. 99
Thompson, Gertrude F. 99
Van Raalte, Martin 256
Volke, Walter 203
Walls, Frank X. 99
Wescott, Cassius Douglas 306

Wiggins, George A. 256
Winget, Sanford E. 256
Woods, Bert L. T. 256
Wynekoop, Charles Ira 306
Yarros, Rachelle S. 203
Yeck, Chas. 148
Young, Charles J. 99
Zimmerman, Augustus G. 99

Editorials

Annual Meeting, The 1946 109
Annual Meeting, The 1946 3
Annual Meeting, A Report on the 1946 258
Black, In Memoriam, Carl Ellsworth 51
Book Reviews ....Feb. 71, Mar. 60, Apr. 58, May 54
Complimenting the Doctor 5
Constructive Program of the American Medical Association for the Improvement of Medical Care 101
County Health Departments 4
House of Delegates, The Special Meeting of the .. 49
Illinois State Medical Society, 1946-1947 Officers of the 260
Medical Care For All the People 1
Meet the New Officers 257
Northwestern University, Expansion Program for 206
Olin West, Retirement of 205
Percy, In Memoriam, James Fulton 260
P. R. N. Feb. 100, Mar. 58, Apr. 204, May 54, June 54
Physicians at Home 152
Public Enemy No. 1, The Present 150
Radio Programs 106
Report on Special Meeting of the House of Delegates 8
Separation of Medical Officers from Service 5
Shoulders, M. D.; President-Elect of The A.M.A., Harrison H. 103
Saunders Joins American College of Surgeons Staff as Assistant Director, Dr. H. Prather 259
Separations from the Service 53
Thanks for the Compliment 151
Voluntary Pre-payment Sickness Plan, American Medical Association 104
Welcome Home, Doctor 152

Industrial Health

Dermatitis, Canvas-Lined Gloves Cause Extensive . 36
Psychiatry in Industry (Cameron) 242
Radium Hazard, Instrument Salvage Presents Serious 36
Team Work for Better Health 37

Marriages

Blades, James E. 305
Cubbins, William R. 305
Hamburger, Walter W. 203
Kretschmer, Herman L. 203

Medical Economics

The Doctor and Certain Responsibilities in Industrial Medicine and Surgery 261
Indiana Plan, (Wessels) 11
Veteran's Hospitals, A New Order in the 209

Medicine and The Armed Forces

Army Awards and Commendations 142
Army Exceeds Quota on Release of Doctors 41
Artificial Limbs Inaugurated, New Course in Care of 41
ASTP Medical Officers to be Called as Replacements, 5,000 141
ASTP Program Terminated June First 249
Awards and Commendations 251
Awards, Medical Department Personnel in Eto get Total of 22,304 42
Capt. Blair is State Medical Officer of Selective Service System 142
Deferment and Deceleration in Medical Education . 43
Discharge, 15,000 Physicians, 5,000 Dentists made Eligible for, ... 39
Erection of New Army Medical Library Building Planned 198
Gardiner General Hospital, New Chief Nurse at .. 42
General Kirk Outlines the Remaining Task 197
Hospital Residencies Under the G.I. Bill 89
Hospitalized Veterans Offered Institute Courses ..250
Hospitals, Army to Release Twenty-three 42
Illinois Doctors Awarded Military Decorations .. 94
Importing of Disease, Army Program Prevents ..250
Legion of Merit to Illinois Doctor 197
Nebraska Representative Miller Praises Work of Medical Services 41
Physical Examinations in October, 1,250,000 Men Given 42
Reconversion of 9-9-9 Program 141
Secretary of War Orders Study on Doctors and Dentists Release Situation 40
SN-7618 Effective Anti-Malarial Drug 198
Streptomycin Allocation Program 249
Surgery in the Veterans Administration, Department of Medicine and 92
Surplus Medical Equipment for Veterans of World War II 140
Veterans Administration Seeks More Army Hospitals 94
Veterans' Hospitals, Consultants Named 142

News of The State

House of Delegates, Special Meeting of the 169
Meetings, Personals, etc ..44, 95, 143, 199, 252, 302
Preliminary Program, of the 1946 Annual Meeting 155

Original Articles

Examination of the Breasts and Pelvic Organs in Apparently Well Women, (Webster, Phillips, Nadelhoffer, Oliver & Parsons) 239

Functional Disease vs. Abdominal Surgery, (Whittaker) 271
Functional Nervous Disorders, (Clark) 68

Hematology, A Round Table, (Alt, Schwartz & Limarzi) 62
Hemochomatosis, (Fishback & Fowler) 30
Herniation of the Intervertebral Disc. A Systematized Technique for the Investigation and Treatment of Lumbosacral and Low Lumbar Lesions, (Spiegel) 188

Illinois Security Hospital, Treatment of the Convulsive State at the, (Arieff) 74
Intra-Mural Group Psycholotherapy, (Klapman) .226
Iritis, Allergic (Bothman) 124

Ochronosis-Like Pigmentation Associated with the Use of Atabrine, (Sugar & Waddell) 234
Ocular Discomfort, Some Reasons for, (Woods) .276

Para and Peri-Urethral Infections of the Female Urethra, (Roeser & Kretschmer) 16
Perianal Urticaria, (Drueck) 72
Pilonidal Sinus, (Raider & Andrews) 288
Preserved Blood Plasma in Civilian Practice, The use of (Pearson) 221
President's Address, (Coleman) 267
Prosthetic Repair of Jaw Injuries, Plastic and Dental (Greeley & Pound) 216
Pseudo-Spirochaetes in Blood (Gowen) 294

Serologic Tests for Syphilis in Eight Thousand Cases, Clinical Evaluation of, (Lubitz) 20
Sterility, (Scrivner) 19
Strabismus, Classification of, (Strich) 25
Surface Defects of Skin: Treatment by Controlled Exfoliation, (Urkov) 75

Teamwork in Medicine, (Hammond) 291
Therapeutic Techniques Used With a Special Group of Disturbed Children, (Angers) 133
Thiouracil and Sulfonamides, Granulocytopenia from the Combined use of, (Taylor) 296
Thrombotic Emergencies, Acute Surgical (Bellas) 116
Thrombocytopenic Purpura Following Angina (Carroll) 121
Tuberculosis Control, The Chicago Plan of, (Tice) 280
Tuberculous Peritonitis Case Reports With Pathological Findings, (Anthony) 82

Urologic Neurosis and Pyschoses (Ritch) 131

Vincent's Angina, Bismuth Subsalicylate in Oil, The Treatment of, Choice in, (Grossman) 28

Physical Medicine Abstracts

.....33, 86, 137, 247, 298

State Department of Public Health

Blood Plasma 111

Department Appointments, New 214
Diagnosis of Gonorrhea, Cultures as an Aid in the, ... 57

Public Health Dentistry, Division of, ... 15
Public Health Education, Division of (Christopher) 211

Sanitary Engineering—An Ally of Medicine 264
Searcy-Claubaugh Law, The (Boyd) 13
Services Rendered by a County Health Department (Boyd) 55
Syphilis, Facilities for the Rapid Treatment of, ..110

Tuberculosis Control, The Division of 213
Tumor Diagnostic Service, Division of Cancer Control 154

Vital Statistics, The 1945 Record of 112

The ILLINOIS Medical Journal

VOL. 89 ✳ NO. 1

89
1946

January, 1946

In This Issue

Para and Peri-Urethral Infections of the Female Urethra

✦

Sterility

✦

.... and Others

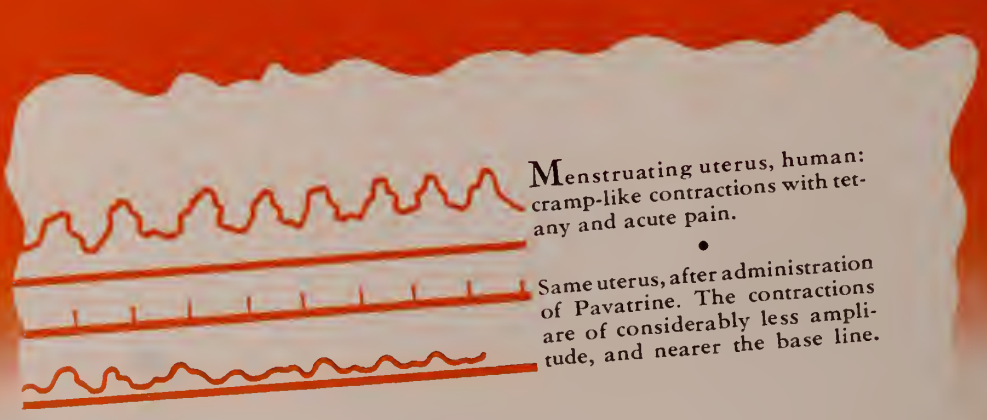
✦

(See page 41 for complete Table of Contents)

ANNUAL MEETING, ILLINOIS STATE MEDICAL SOCIETY
PALMER HOUSE, CHICAGO, MAY 14, 15, 16, 1946

OFFICIAL JOURNAL OF THE ILLINOIS STATE MEDICAL SOCIETY

THE *CRAMPS* OF DYSMENORRHEA
brought under control



Menstruating uterus, human: cramp-like contractions with tetany and acute pain.

•

Same uterus, after administration of Pavatrine. The contractions are of considerably less amplitude, and nearer the base line.

Intrauterine balloon tracings reveal that Pavatrine has a morphine-like action in counteracting the tetanic contractions of essential dysmenorrhea. Symptomatic relief is afforded during the period of spasmolytic effect.

PAVATRINE

(B-diethylaminoethyl fluorene-9-carboxylate-hydrochloride)

Indicated in:

- Dysmenorrhea due to hypertonicity or excessive contractions.
- Gastrointestinal Spasm—in gastric, duodenal, colonic.
- Urinary Bladder Spasm—in cystitis; instrumentation or tenesmus.

Average Dose: 1 or 2 tablets three times daily.

Pavatrine is the registered trademark of G. D. Searle & Co., Chicago 80, Illinois.

SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

Entered as Second-Class Matter July 21, 1919, at the Post Office, Oak Park, Illinois, under the Act of March 8, 1879. Acceptance for mailing at special rate of postage provided for in Section 1102, Act of October 8, 1917, authorized July 15, 1918. Office of Publications, 715 Lake Street, Oak Park, Ill.

Want better protection . . .

. . . Policy coverage is no better than the service by which it is administered.

for greater malpractice hazards?. .

. . . Prevailing unrest multiplies the dangers in every doctor's practice. His protection should therefore be more than good.

Use Specialized Service!

. . . Even if all policies were the same, Specialized Service would still put the "plus" in Medical Protective.

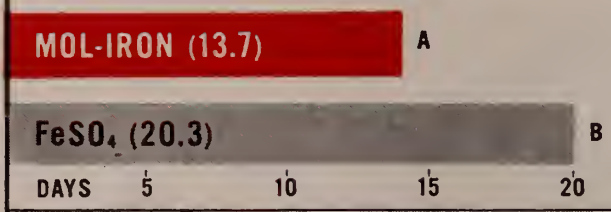
The Medical Protective Company

of

Fort Wayne, Indiana

A NEW AND DEFINITE ADVANCE

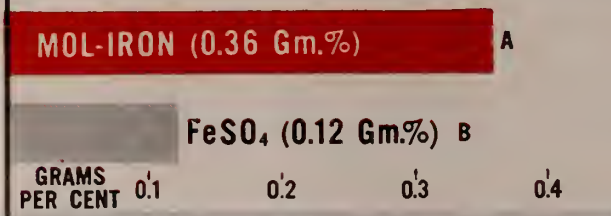
RAPIDITY OF CLINICAL RESPONSE (Days)



(A) Completely effective therapeutic resp (return to normal blood values) was tained in an average of 13.7 days of Iron therapy.

(B) Ferrous sulfate therapy *failed* to pro normal hemoglobin values after an ave of 20.3 days.

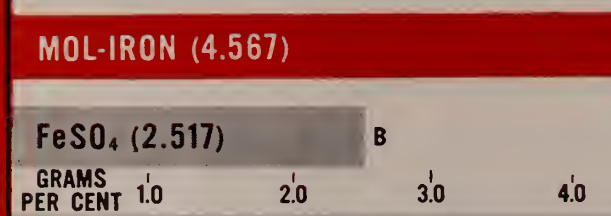
AVERAGE DAILY HEMOGLOBIN INCREASE (Gm. Per Cent)



(A) The group treated with Mol-Iron c aged a daily hemoglobin increase of per cent (0.36 Gm. per cent).

(B) The group treated with ferrous su showed an average daily gain of hemc bin of 0.83 per cent (0.12 Gm. per ce a response about one-third as effective.

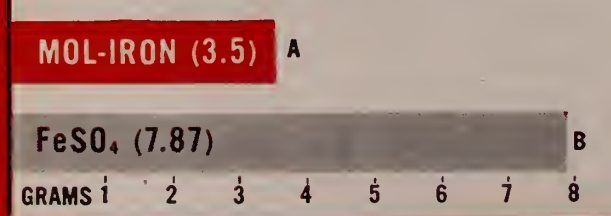
TOTAL HEMOGLOBIN INCREASE (Gm. Per Cent)



(A) The total hemoglobin increase (in an a age of 13.7 days) averaged 31 per cent (Gm. per cent) in the Mol-Iron treated gr

(B) A mean gain of only 17 per cent (2.51 per cent) hemoglobin resulted in an ave period of 20.3 days during which the rous sulfate treated group was observec

THERAPEUTIC INTAKE OF BIVALENT IRON (Gm.)



(A) The Mol-Iron treated group receive average total of 3.528 Gms. of bivalent to produce the sought for result (retur normal blood values).

(B) While an average ingestion of 7.87 of bivalent iron failed to achieve an opt response in the ferrous sulfate treated gr

The charts summarize the results of a controlled study of comparative therapeutic [illegible] hemorrhagic and nutritional hypochromic anemias.

The series includes 49 cases treated with Mol-Iron and 21 with exsiccated ferrous sulfate; [illegible] sults are typical of those observed in treatment of iron-deficiency anemias with White's Mol-Iro

in Treating Iron-Deficiency Anemias

A specially processed, co-precipitated complex of molybdenum oxide (3 mg.) and ferrous sulfate (195 mg.).

White's MOL-IRON TABLETS

Available clinical evidence indicates that, in hypochromic anemia, the therapeutic response to this highly effective synergistic combination—as compared with equivalent dosage of ferrous sulfate alone—has unusual advantages:

1. NORMAL HEMOGLOBIN VALUES ARE RESTORED MORE RAPIDLY, INCREASES IN THE RATE OF HEMOGLOBIN FORMATION BEING AS GREAT AS 100% OR MORE IN PATIENTS STUDIED.
2. IRON UTILIZATION IS SIMILARLY MORE COMPLETE.
3. GASTRO-INTESTINAL TOLERANCE IS NOTABLY SATISFACTORY—even among patients who have previously shown marked gastro-intestinal reactions following oral administration of other iron preparations.

INDICATED IN: Hypochromic (iron-deficiency) anemias caused by inadequate dietary intake or impaired intestinal absorption of iron; excessive utilization of iron, as in pregnancy and lactation; chronic hemorrhage.

DOSAGE: One or two tablets three times daily after meals.

Available in bottles of 100 and 1000 tablets. Ethically promoted—not advertised to the laity.

PHARMACEUTICAL White LABORATORIES, INC. NEWARK 7, N. J. MANUFACTURERS



"FROM A CLINICAL POINT OF VIEW...

*it must be assumed that every patient with chronic infection is anemic."**

● For treating hypochromic anemias, Hemo-genin combines the advantages of Fergon (Ferrous Gluconate Stearns) with the nutritional values of vitamin B complex plus liver concentrate. Because Fergon is rarely associated with gastro-intestinal distress, Hemo-genin may be administered before meals to enhance iron absorption.

Hemo-genin

Fergon Plus B Complex

FOR HYPOCHROMIC ANEMIAS REQUIRING IRON AND B COMPLEX



Frederick Stearns & Company
Division

DETROIT 31, MICHIGAN

NEW YORK KANSAS CITY SAN FRANCISCO WINDSOR, ONTARIO SYDNEY, AUSTRALIA AUCKLAND, NEW ZEALAND

FACTS ABOUT HEMO-GENIN

COMPOSITION: Fergon (Ferrous Gluconate Stearns), synthetic vitamin B complex factors, and liver concentrate. Six capsules daily supply 12 gr. ferrous gluconate and the daily requirement of B vitamins.

NON-IRRITATING to gastro-intestinal mucosa because low degree of ionization makes it virtually non-astringent. May be administered before meals to facilitate maximum absorption.

GREATER iron utilization shown by clinical comparison of ferrous gluconate with other iron salts.†

†J. Clin. Investigation 16:547, 1937.

INDICATED in hypochromic anemias requiring iron and vitamin B complex. Especially valuable when patients do not tolerate other forms of iron.

DOSAGE: Two capsules three times daily, before or after meals.

SUPPLIED in bottles of 100 and 500 capsules.

FURTHER FACTS AND SAMPLES WILL BE GLADLY SENT ON REQUEST

*J.A.M.A. 123:1007, 1943.

TRADE-MARK HEMO-GENIN – REG. U.S. PAT. OFF.



In Estrogenic Therapy ... TOLERANCE

One of the important advantages of "Premarin" lies in the fact that it is exceptionally well tolerated. Although highly potent, "Premarin" rarely produces unpleasant side effects—a statement which finds ample corroboration in the extensive bibliography. In "Premarin" the physician will find a medium for estrogenic therapy which is noted for its therapeutic effectiveness. "Premarin" is derived exclusively from natural sources and its administration is usually followed by what is invariably described by the patient as a general feeling of well-being.

ESSENTIALLY SAFE • HIGHLY POTENT • ORALLY ACTIVE
NATURALLY OCCURRING • WATER SOLUBLE
WELL TOLERATED • IMPARTS A FEELING OF WELL-BEING

ACCEPTED AMERICAN MEDICAL ASSN Council on Pharmacy and Chemistry

"Premarin" *conjugated estrogens (equine)*

Reg. U. S. Pat. Off

TABLETS

Available in 2 potencies. No. 866 (the YELLOW tablet), in bottles of 20, 100 and 1,000 tablets.
No. 867 Half-Strength (the RED tablet), in bottles of 100 and 1,000 tablets.

Ayerst

AYERST, McKENNA & HARRISON LTD., 22 East 40th Street, New York 16, N. Y.



Relentless, unnerving, anoperineal itching is among the most tormenting discomforts women are called upon to endure. The paroxysms of this frequently occurring syndrome appear without warning, day or night, and instantly rob the victim of further poise and productivity. Dependable, rapid relief is required to prevent serious emotional imbalance and traumatic lesions due to the irresistible desire to scratch.

With Calmitol, such relief is promptly and dependably available. Calmitol quickly stops the annoying itching, a single application holding it in check for hours. Subsequent applications can readily be made at work, since the tube of Calmitol Ointment is easily carried in pocket or purse.

CALMITOL

THE DEPENDABLE ANTI-PRURITIC

Thos. Leeming & Co. Inc.

155 East 44th Street, New York City 17, N. Y.

Calmitol stops itching by direct action upon cutaneous receptors and end-organs, minimizing transmission of offending sensory impulses. The ointment is bland and nonirritating, can safely be applied to any skin or mucous membrane surface. Active ingredients: camphorated chloral, menthol, and hyoscyamine oleate. Calmitol Liquid, prepared with an alcohol-chloroform-ether vehicle, should be used only on unbroken skin areas.



when we were young and gay

"Childhood," to paraphrase G. B. Shaw, "is such a delightful period that it seems a shame to waste it on children." Yet, old age also may be delightful.

For those who remain young in heart, their spirit warmed by tender reminiscence, the advancing years pass gracefully. For others, these may be lean and bitter years of depression . . . the mind and body plagued by a host of minor ailments. Chronic constipation imposes a particularly oppressive burden.

Gentle yet effective management of constipation with 'AGAROL'* Emulsion brings welcome relief to those who were once young and gay; as well as to those who are still young . . . and should be gay.

For additional pharmaceutical details consult your pharmacist—for more extensive medical data write Medical Division of William R. Warner & Co.

William R. WARNER and Co. Inc. 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'agarol'

Emulsion of mineral oil and an agar-gel with phenolphthalein. Supplied in bottles of 6, 10 and 16 fluidounces.

*Trademark Reg. U. S. Pat. Off.

White's

"If in the process of chewing and swallowing, they (the sulfa drugs) come into intimate contact with the gums, pharynx and oesophagus, the possibilities for more effective treatment of gingivitis, stomatitis, pharyngitis and oesophagitis by this means may be opened."

— ARNETT, J. H.,
Am. J. of the Medical Sciences
205:6-8, Jan. 1943



HIGH LOCAL CONCENTRATION: One pleasantly flavored Sulfathiazole Gum tablet chewed for *one-half to one hour* promptly provides a high concentration of locally active sulfathiazole (average 70 mg. per cent) *that is maintained throughout the chewing period.*



LOW (NEGLIGIBLE) SYSTEMIC ABSORPTION: Blood levels of the drug, even when maximal dosage is employed, are almost negligible —rarely reaching 0.5 to 1 mg. per cent

***A product of WHITE LABORATORIES, IN**

SULFATHIAZOLE GUM*

In Oral and Pharyngeal Infections . . .

One tablet of White's Sulfathiazole Gum chewed for one-half to one hour—

1. promptly provides a high salivary concentration of *locally active* (dissolved) sulfathiazole
2. that is *sustained throughout the chewing period* in immediate contact with infected oropharyngeal mucosal surfaces,
3. yet even with maximal dosage, resulting *blood levels* remain so low as to be virtually negligible.

Indications: Local treatment of sulfonamide-susceptible infections f oropharyngeal areas; acute tonsillitis and pharyngitis; septic sore hroat; infectious gingivitis and stomatitis; acute Vincent's disease.

Dosage: One tablet chewed for *one-half to one hour* at intervals f one to four hours depending upon the severity of the con- ition. If preferred, several tablets — rather than a single ablet — may be chewed *successively* during each dosage eriod without significantly increasing the amount of ulfathiazole systemically absorbed.

Available in packages of 24 tablets, sanitaped, in slip-sleeve prescription boxes.

MPORTANT: Please note that your patient requires your prescription to obtain this product from the pharmacist.



harmaceutical Manufacturers, NEWARK 7, N. J.



"Streamline" TO CREOSOTE THERAPY

Rx Calcreose

PALATABLE • WELL TOLERATED • THERAPEUTICALLY EFFECTIVE

The development of CALCREOSE (Maltbie) has, indeed, "smoothed the rough spots" in creosote therapy so frequently provocative heretofore of nausea and distress. • Moreover, CALCREOSE (calcium creosotate) exerts bactericidal and bacteriostatic action up to *three times as great* as that of creosote. • Thus, in providing all the well-known benefits of creosote in a *pleasant* and *palatable* form, CALCREOSE proves highly effective in many bronchial and respiratory affections . . . lessening cough, diminishing expectoration, reducing its purulency and deodorizing sputum. Also it tends to stimulate the appetite and improve the patient's general condition.

AVAILABLE: As tablets (4 gr.) in bottles of 100, 500, and 1000. COMPOUND SYRUP CALCREOSE in pint or gallon bottles.

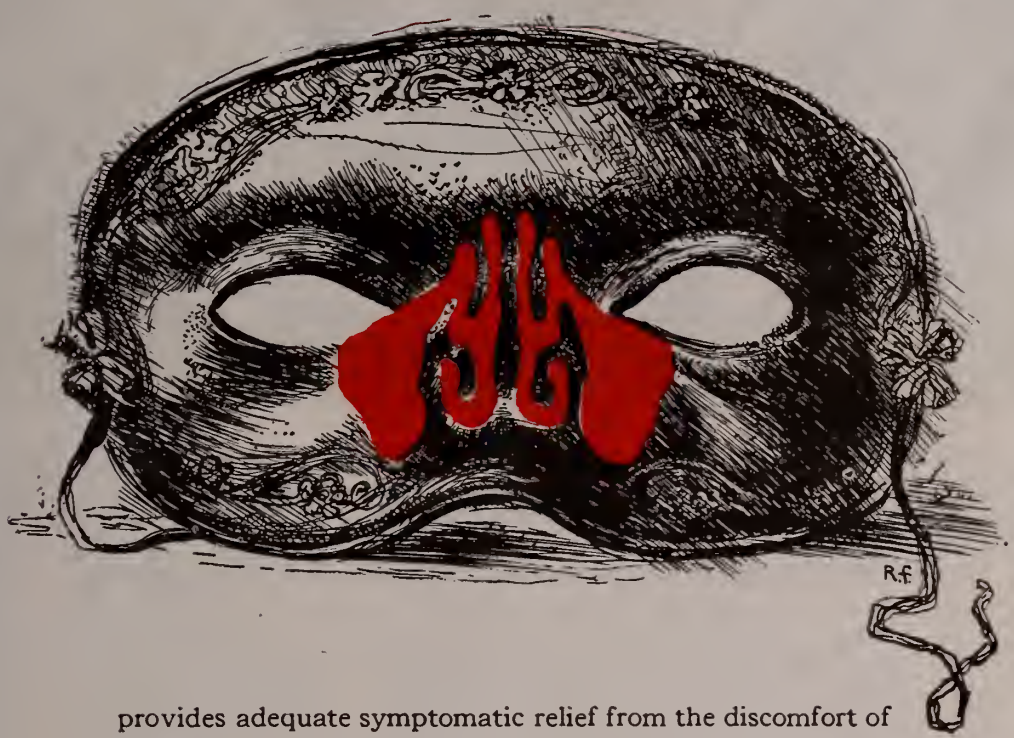


Calcreose

THE MALTBIE CHEMICAL COMPANY • NEWARK, NEW JERSEY

...remove the mask of nasal congestion!

PRIVINE HYDROCHLORIDE



provides adequate symptomatic relief from the discomfort of congested nasal passages in conditions such as coryza and allergic rhinitis. Privine has notable advantages which you and your patients will appreciate:

- **Dramatic promptness of action.**
- **Prolonged vasoconstriction.**
- **Non-interference with ciliary activity.**
- **Absence of irritation.**

Privine, accepted by the A.M.A. Council on Pharmacy and Chemistry, is offered in two concentrations: 0.1 per cent, recommended for adults only; 0.05 per cent for children, also found effective in many adult cases. Your pharmacy can supply Privine in bottles of 1 oz. and 16 ozs.

PRIVINE *Trade Mark Reg. U. S. Pat. Off. and in Canada*



CIBA PHARMACEUTICAL PRODUCTS, INC.

Summit, New Jersey

In Canada: CIBA COMPANY LIMITED, MONTREAL



Harvesting influenza virus from chick extraembryonic fluids

Now It Can Be Told

● The prevalence of Influenza during World War I stimulated increased research for better immunizing agents to control this dread disease.

Since 1933 when Smith, Andrewes and Laidlaw isolated a filtrable virus from patients ill with clinical influenza and established the viral etiology of the disease, numerous attempts to develop a prophylactic vaccine have been made.

Burnet, Henle, and Nigg obtained a high concentration of virus in chick extraembryonic fluids; and vaccines made from such fluids were subsequently studied by a large number of investigators. Some degree of efficacy of these vaccine preparations was shown both by antibody response and by protection against experimental infection of test animals and of human beings.

Although for security reasons the fact has not been previously revealed, the Pitman-Moore Laboratories are now proud to list such a vaccine among the prophylactic and therapeutic medicines of which it has supplied large quantities to the armed forces.

The List Includes:

Sulfonamides
Parenteral Solutions
Antipyretics
Typhus Vaccine
Tetanus Toxoid
Influenza Virus Vaccine

PITMAN-MOORE COMPANY

PHARMACEUTICAL AND BIOLOGICAL CHEMISTS

Division of Allied Laboratories, Inc., • Indianapolis 6, Indiana

INTRODUCING

Combisul - TD

(equal parts of sulfa*thiazole* and sulfa*diazine*) **in one tablet**



TO REDUCE RENAL TOXICITY INCIDENT TO SULFONAMIDE THERAPY

Recent experimental and clinical studies[1,2] prove that administration of sulfathiazole and sulfadiazine in combination in equal parts reduces renal complications such as crystalluria, hematuria and urinary tract blockage, and is much safer than either drug used alone in whole dosage. Simultaneously, antibacterial activity and therapeutic efficacy are maintained.

COMBISUL-TD presents 0.25 gram sulfathiazole and 0.25 gram sulfadiazine — a total of 0.5 gram per tablet. No signs of renal toxicity have been encountered by use of this mixture and even crystalluria is infrequent. The indications for, and dosage of, COMBISUL-TD are the same as for either drug administered alone. Meningitis is an exception, for which COMBISUL-DM, a combination of 0.25 gram sulfadiazine and 0.25 gram sulfamerazine is available.

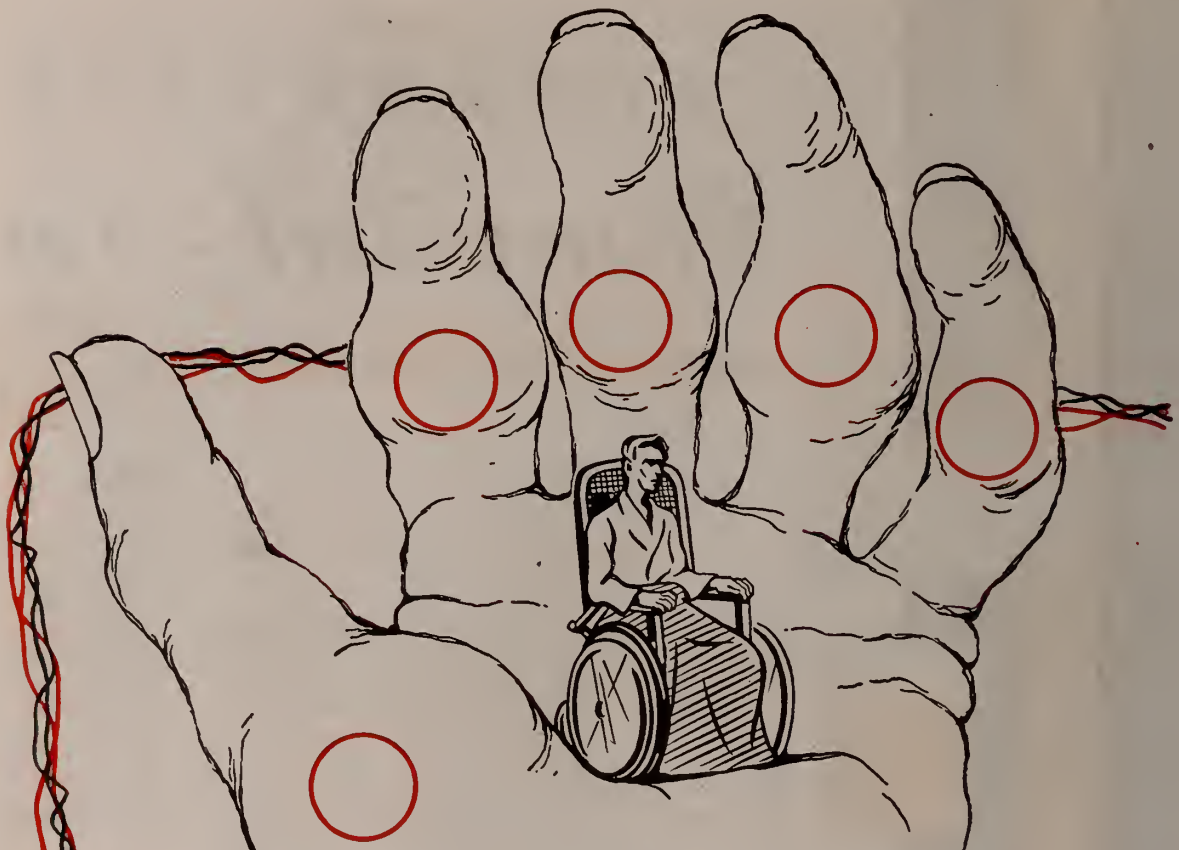
COMBISUL-TD available in 0.5 gram tablets. Bottles of 100 and 1000.
COMBISUL-DM available in 0.5 gram tablets. Bottles of 100 and 1000.

1. Lehr, D.: Proc. Soc. Exper. Biol. & Med. *58*:11, 1945.
2. Lehr, D.: In press.

Trade-Marks COMBISUL-TD and COMBISUL-DM — Reg. U. S. Pat. Off.

SCHERING

Schering CORPORATION • BLOOMFIELD, N. J.
IN CANADA, SCHERING CORPORATION LIMITED, MONTREAL



DARTHRONOL

IN THE *Systemic*

REHABILITATION OF CHRONIC ARTHRITICS

That chronic arthritis is a systemic disease, of which the joint lesions are only one manifestation . . .



... is revealed by the frequent concurrence of many symptoms referable to systemic disturbances: loss of weight, weakness, fatigability, anemia, neuritis, senile metabolic changes, gastro-intestinal affections, impairment of liver function, increased sedimentation rate, impaired carbohydrate metabolism, and early development of arteriosclerosis.

For the effective treatment of a systemic disease as complex as arthritis it is necessary to institute a complete program of systemic rehabilitation. Such a program must include optimal nutrition, physical and mental rest, supervised exercise, physical therapy, orthopedic measures, removal of proven foci of infection, and a supply of all the essential vitamins in amounts sufficient to exert both nutritional and pharmacodynamic influences.

Darthronol merits inclusion in such a program of systemic rehabilitation. It supplies in a single capsule massive dosage of vitamin D in addition to adequate doses of the eight other essential vitamins. The need for greatly increased amounts of all the essential vitamins has been repeatedly demonstrated in patients afflicted with chronic arthritis.

Extensive bibliography on the role of these vitamins in the management of arthritics and the comprehensive brochure "Systemic Therapy in the Arthritides" will be sent on request.

J. B. ROERIG & COMPANY
536 Lake Shore Drive • Chicago 11, Illinois

Multiple Vitamin Supplementation

LOGICAL, ECONOMICAL PRODUCT FOR A LOGICAL NEED

EACH CAPSULE CONTAINS:	
Vitamin A	5000 U.S.P. units
Vitamin D	800 U.S.P. units
Thiomine Hydrochloride, U.S.P.	3 mg.
Riboflavin	3 mg.
Ascorbic Acid, U.S.P.	75 mg.
Nicotinamide	20 mg.
Pyridoxine Hydrochloride	0.5 mg.
Calcium Pantothenate	5 mg.
Mixed Tocopherols biologically equivalent to 3 mg. Alpha Tocopherol.	

In those conditions for which multiple vitamin supplementation is rationally indicated,†

White's NEO MULTI-VI CAPSULES

offer a preparation formulated upon a sound therapeutic basis—realistic efficiency—practical usefulness—and *economy* to the patient.

The well-balanced formula contains nine vitamins—including all clinically established vitamins in amounts safely above adult basic daily requirements,* yet not wastefully in excess of average patient's needs.

Small, easy-to-take capsules. Price to the patient is also small for comparable vitamin potency. The White name is assurance of stability and uniformity.

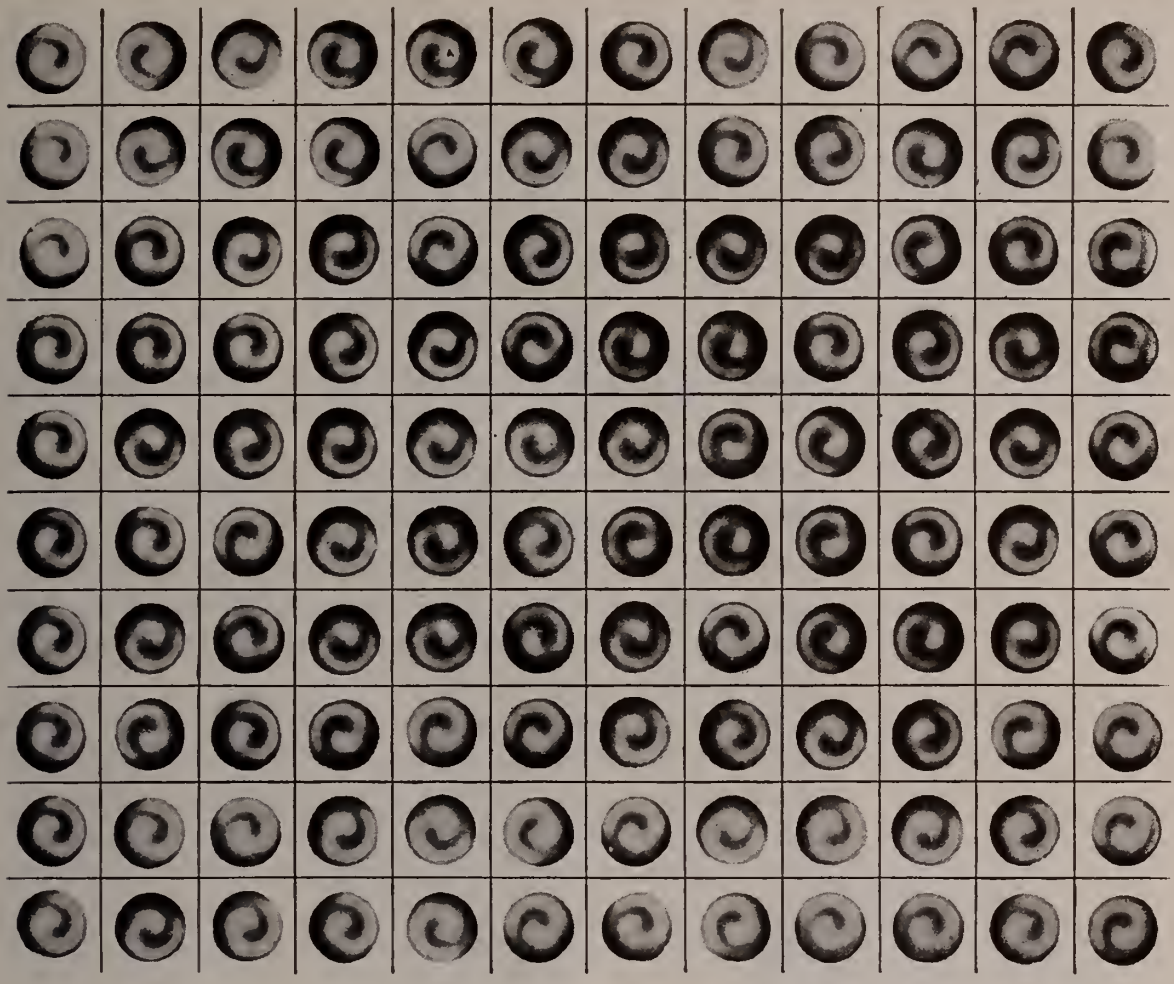
†Indications: Routine prophylaxis against dietary deficiencies—increased metabolic rate—thyroid dysfunction; suspected border-line multiple deficiencies; suboptimal nutrition—restricted diets—the aged—wasting disease—pre- and post-operatively—in convalescence—pregnancy—lactation.

Bottles of 25, 100, 500 and 1000 capsules.

*Promulgated in regulations of Food and Drug Administration, 1941

ETHICALLY PROMOTED—NOT ADVERTISED TO THE LAITY

WHITE LABORATORIES, INC.
Pharmaceutical Manufacturers, Newark 7, N. J.



a normal R.B.C. lives 120 days*

Although the four month span of the normal erythrocyte may be considerably shortened during anemic states, the physician can lengthen this pathologically curtailed life by appropriate therapy. 'Tabloid' 'Ferad' No. 2, a clinically proved agent for the treatment of iron-deficiency anemias, contains the most effective therapeutic form of iron—ferrous sulfate (Ferrous Sulfate, Anhydrous gr. 2-3/5) combined with enough sodium carbonate (Sodium Carbonate, Anhydrous gr. 1-4/5) to assure optimal gastric tolerance.

*Callender, S. T. J. Path. & Bact. 57:129, January 1945

'Tabloid' 'FERAD' No. 2

BOTTLES OF 100 AND 500...'Tabloid' and 'Ferad' Registered Trademarks

BURROUGHS WELLCOME & CO. (U.S.A.) INC. 9-11 EAST 41ST ST., NEW YORK 17, N.Y.

vasoconstriction in minut

In the treatment of nasal and sinus infections, Paredrine-Sulfathiazole Suspension . . .

1. Affords more rapid, complete and prolonged shrinkage than that produced by ephedrine in equal concentration. Ventilation and drainage are promptly promoted and infected areas are quickly rendered accessible to the sulfathiazole.

2. Provides prolonged bacteriostasis. Paredrine-Sulfathiazole Suspension covers the nasal mucosa with a fine, even frosting of free sulfathiazole, which does not quickly wash away, *but keeps producing bacteriostatic ac hour after hour.* (An objection to solutions of sodium sulfathiazole is the improbability of their remaining in contact with the mucosa long enough to be effective.)

Smith, Kline & French Laboratories—Philadelphia, Pa.

PAREDRINE—SULFATHIAZO



teriostasis for hours

SPENSION



Do you know

ABOUT THESE CONVENIENT NEW FORMS OF PENICILLIN?



TABLETS PENICILLIN CALCIUM SQUIBB are individually and hermetically sealed in aluminum foil to prevent deterioration from moisture. Hence physicians can prescribe precisely the number needed without fear of potency loss. Penicillin-destructive gastric juices are buffered by 0.5 gm. of trisodium citrate in each tablet. Tablets Penicillin Calcium Squibb provide 20,000 units, making oral therapy feasible for many conditions which heretofore could be treated only by repeated parenteral injections.

Squibb also has available these new convenient forms of penicillin:

TOPICILLIN CHEWING TROCHES

20,000 units penicillin calcium in a flavored paraffin base, each troche individually wrapped. Box of 6.

TOPICILLIN OINTMENT

General purpose ointment containing 1,000 units penicillin calcium per gram in a base of petrolatum, anhydrous lanolin, beeswax and peanut oil. Tube of 14.5 Gm. (½ oz.)

TOPICILLIN OINTMENT OPHTHALMIC

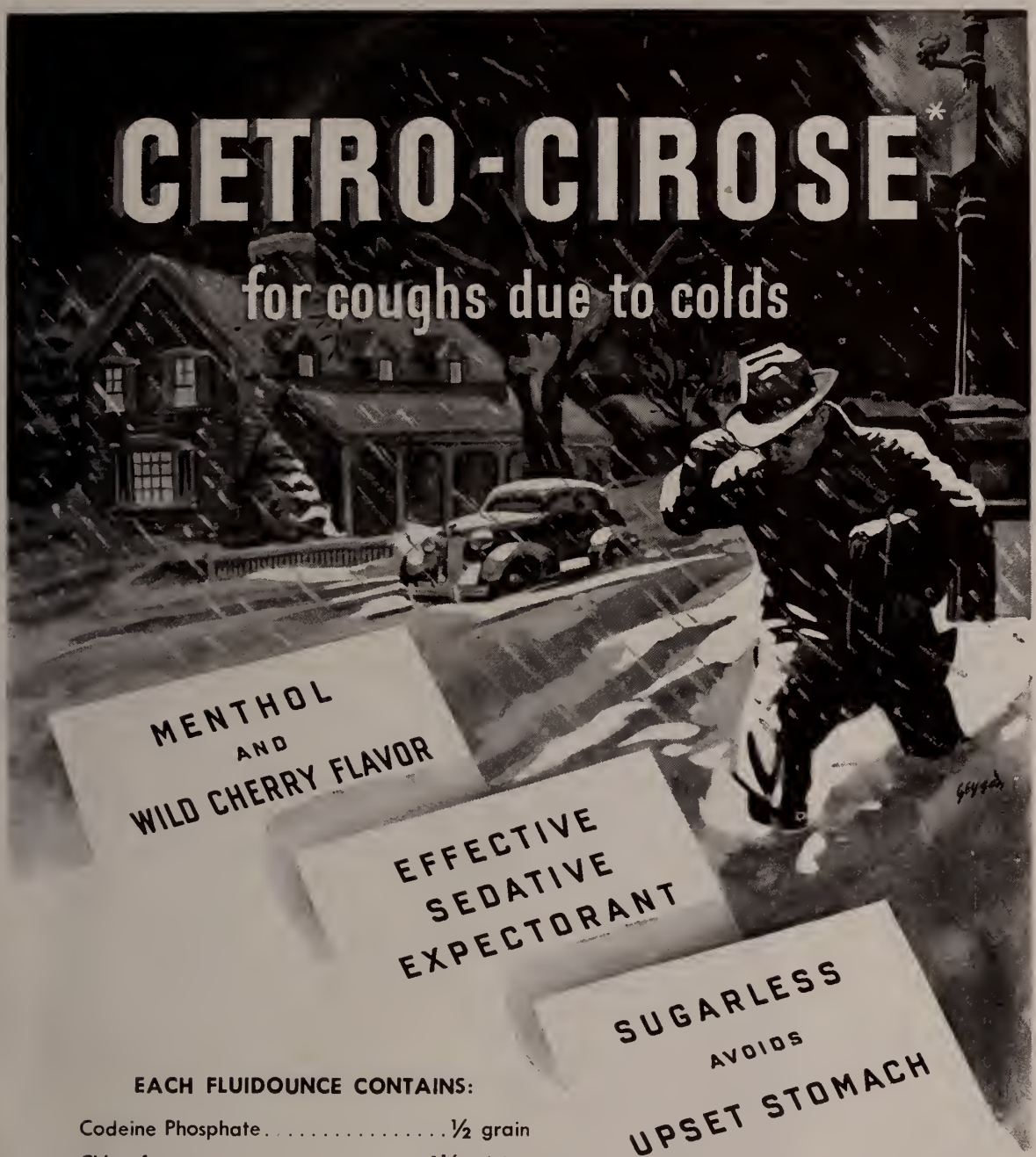
1,000 units penicillin calcium per gram in a base similar to general purpose ointment, but with consistency adjusted to ophthalmic use. Tube of 3.6 Gm. (⅛ oz.)

DELACILLIN

Penicillin calcium in peanut oil with beeswax, 300,000 units per cc. 1-cc. and 10-cc. vials.

SQUIBB *Penicillin Products*

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858



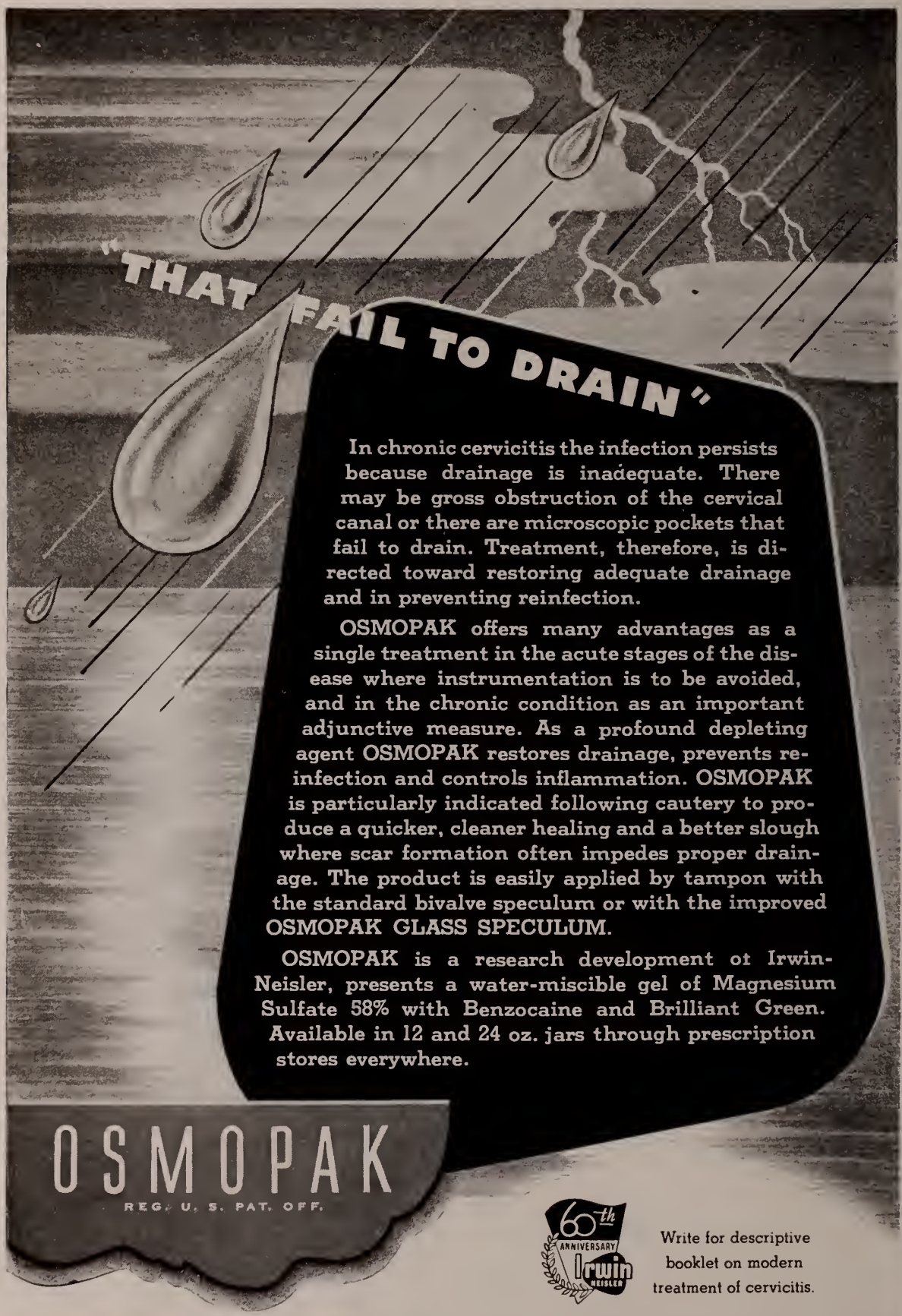
EACH FLUIDOUNCE CONTAINS:

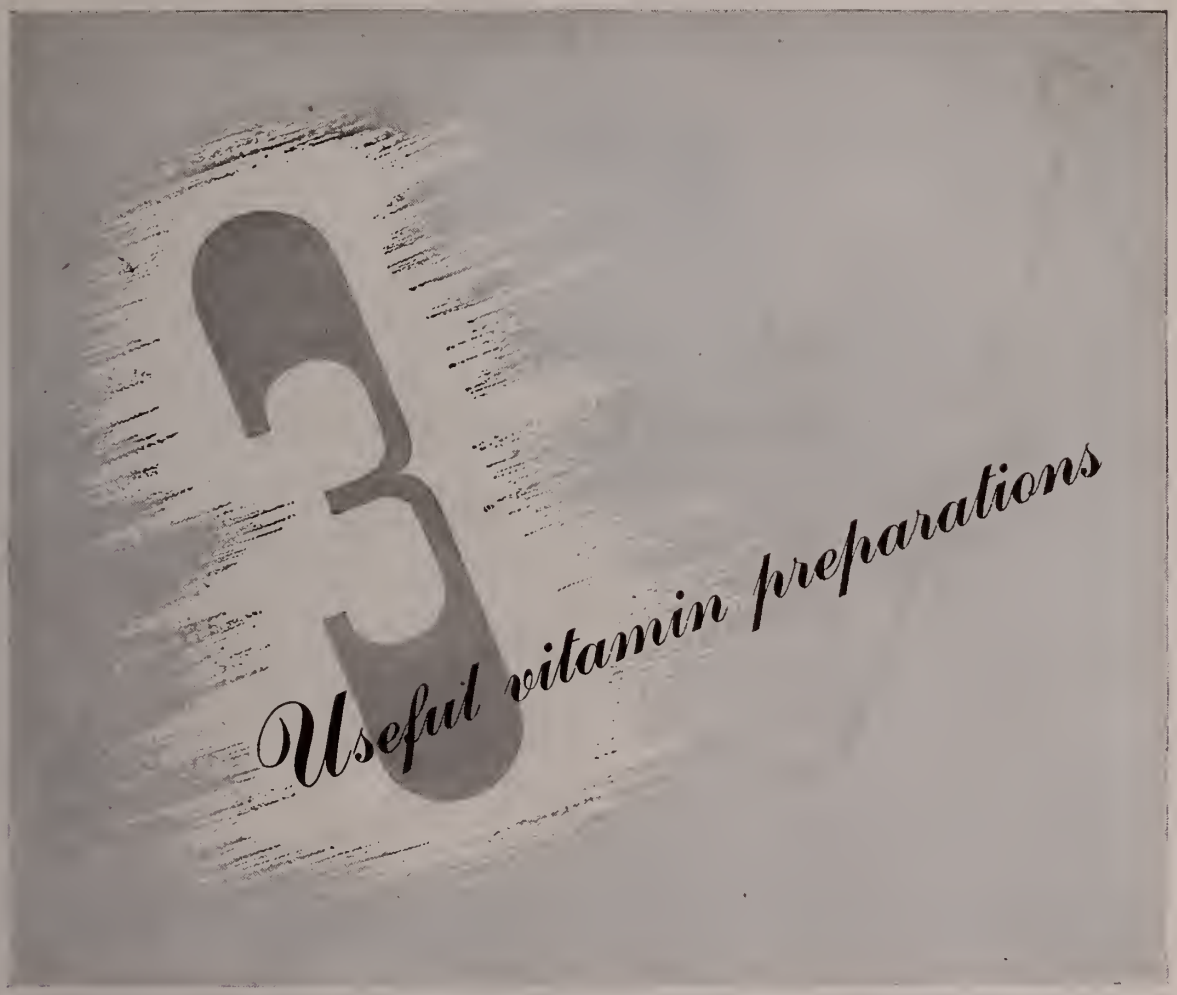
Codeine Phosphate	½ grain
Chloroform	1½ minims
Alcohol	1½ per cent
Fluidextract of Ipecac	1 minim
Glycerin	240 minims
Potassium Guaiacolsulfonate	8 grains
Sodium Citrate	18 grains
Citric Acid	6 grains

Supplied in pint and gallon bottles

Wyeth
*REG. U. S. PAT. OFF.

WYETH INCORPORATED • PHILADELPHIA 3 • PA.


"THAT FAIL TO DRAIN"
In chronic cervicitis the infection persists because drainage is inadequate. There may be gross obstruction of the cervical canal or there are microscopic pockets that fail to drain. Treatment, therefore, is directed toward restoring adequate drainage and in preventing reinfection.
OSMOPAK offers many advantages as a single treatment in the acute stages of the disease where instrumentation is to be avoided, and in the chronic condition as an important adjunctive measure. As a profound depleting agent OSMOPAK restores drainage, prevents reinfection and controls inflammation. OSMOPAK is particularly indicated following cautery to produce a quicker, cleaner healing and a better slough where scar formation often impedes proper drainage. The product is easily applied by tampon with the standard bivalve speculum or with the improved OSMOPAK GLASS SPECULUM.
OSMOPAK is a research development of Irwin-Neisler, presents a water-miscible gel of Magnesium Sulfate 58% with Benzocaine and Brilliant Green. Available in 12 and 24 oz. jars through prescription stores everywhere.
OSMOPAK
REG. U. S. PAT. OFF.
60th ANNIVERSARY Irwin
Write for descriptive booklet on modern treatment of cervicitis.
IRWIN, NEISLER & CO., DECATUR, ILLINOIS





CAL-C-TOSE 'ROCHE'

. . . makes a tempting beverage when mixed with hot or cold milk, supplying ample amounts of vitamins A, B_1, B_2, C and D, as well as calcium and phosphorus. Its delicious chocolate flavor carries no suggestion of medication. 12-oz and 5-lb containers.



VITAMINETS 'ROCHE'

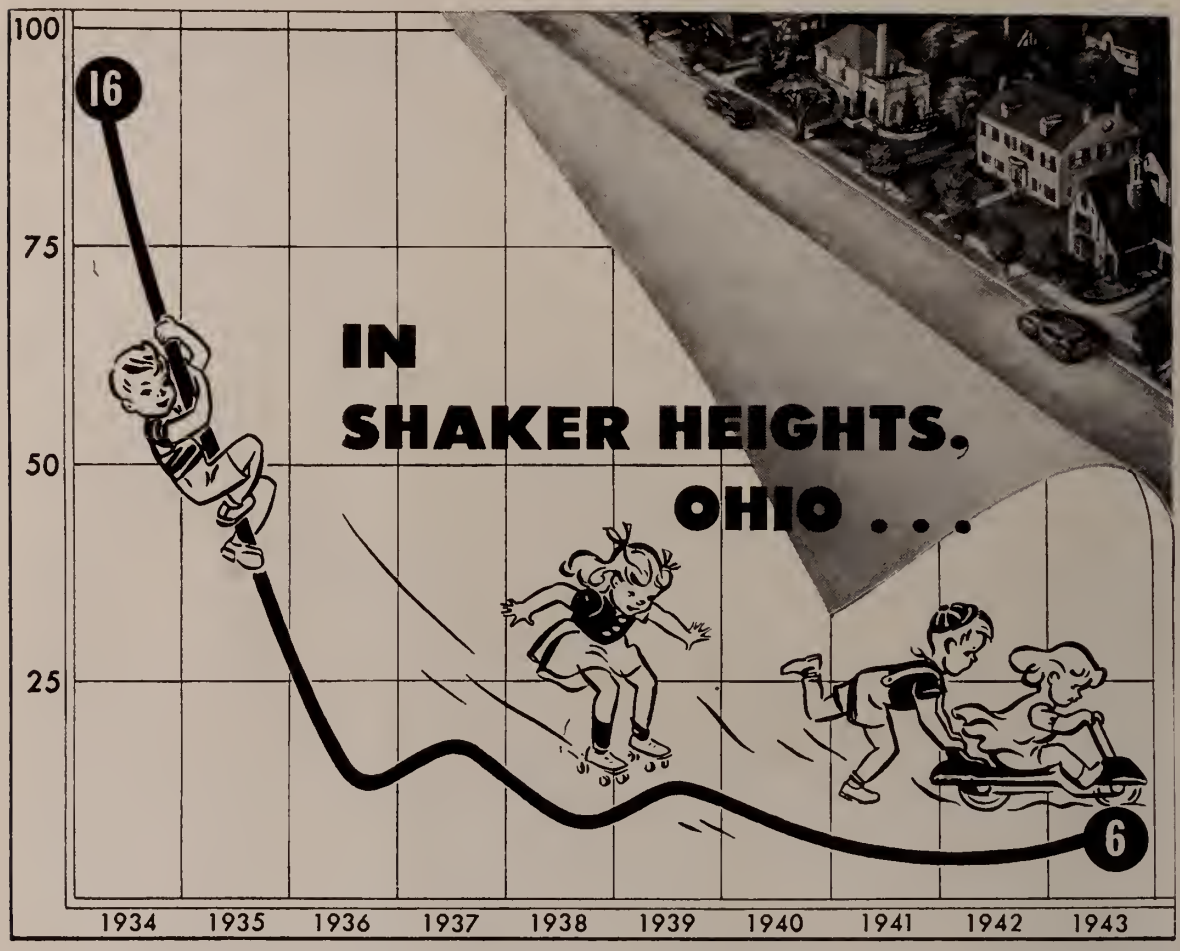
. . . provides 9 vitamins and 5 minerals in a pleasant-flavored tablet which is readily acceptable to children and adults—a tablet with a licorice flavor so palatable that it may be chewed. Bottles of 30, 100 and 250.



VI-PENTA DROPS 'ROCHE'

. . . an easy-to-take, non-alcoholic multivitamin preparation with liberal amounts of vitamins A, B_1, B_2, C, D, and niacinamide. 15-cc vials and 60-cc packages.

HOFFMANN-LA ROCHE, INC., NUTLEY 10, N. J.

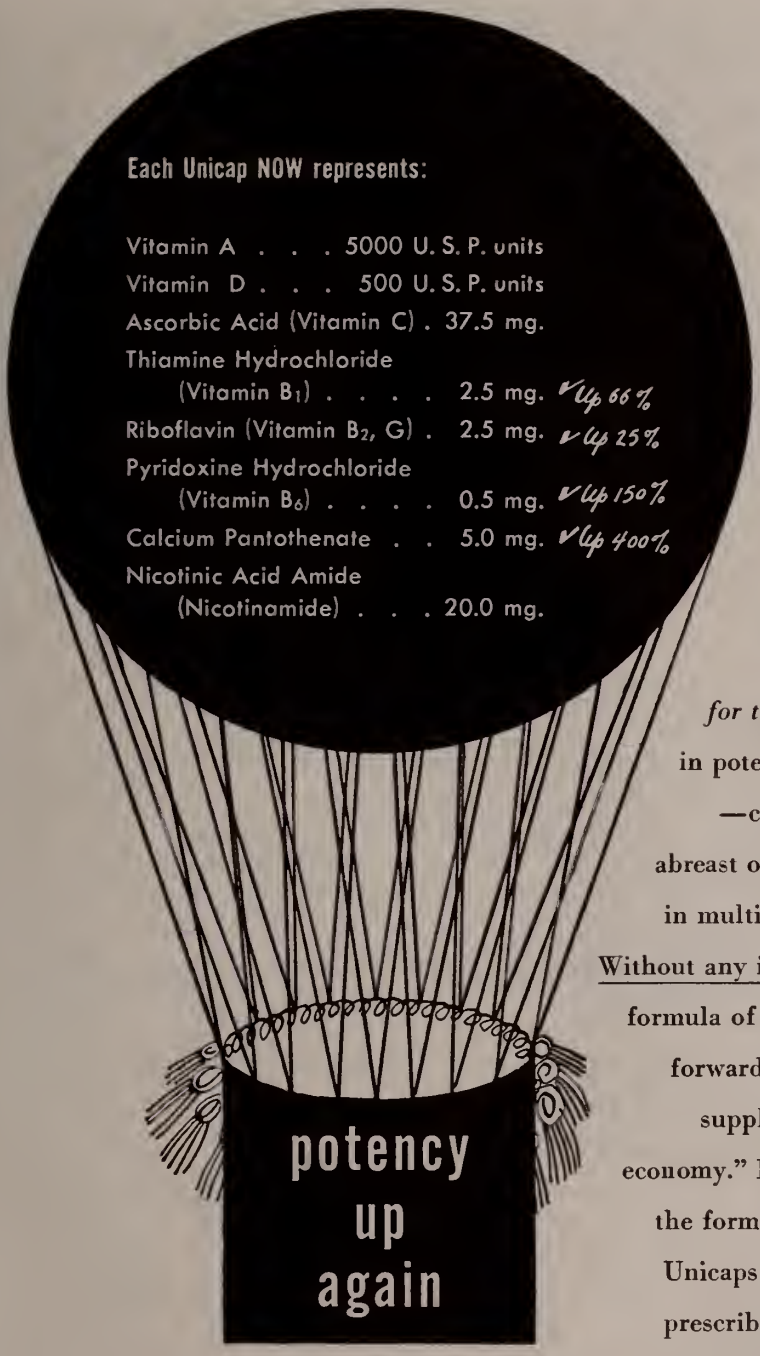


Nine years' routine immunization of Shaker Heights children of pre-school age against whooping cough, using Sauer's vaccine, has cut the annual incidence of pertussis in this age group from 91 to a yearly average of 6 during a 4-year period . . . and the six who contracted the disease in 1943 were children *who had not been immunized.*[1]

[1] Garvin, J. A., Ohio State M. J. 41:229, 1945.

PERTUSSIS VACCINE IMMUNIZING (SAUER) IS PRODUCED EXCLUSIVELY BY . . . .

PARKE, DAVIS
& COMPANY
DETROIT 32, MICHIGAN



STILL KEEPING A PROMISE

". . . that Unicaps will always be a good value — an excellent formula at a low price."

POTENCY UP AGAIN

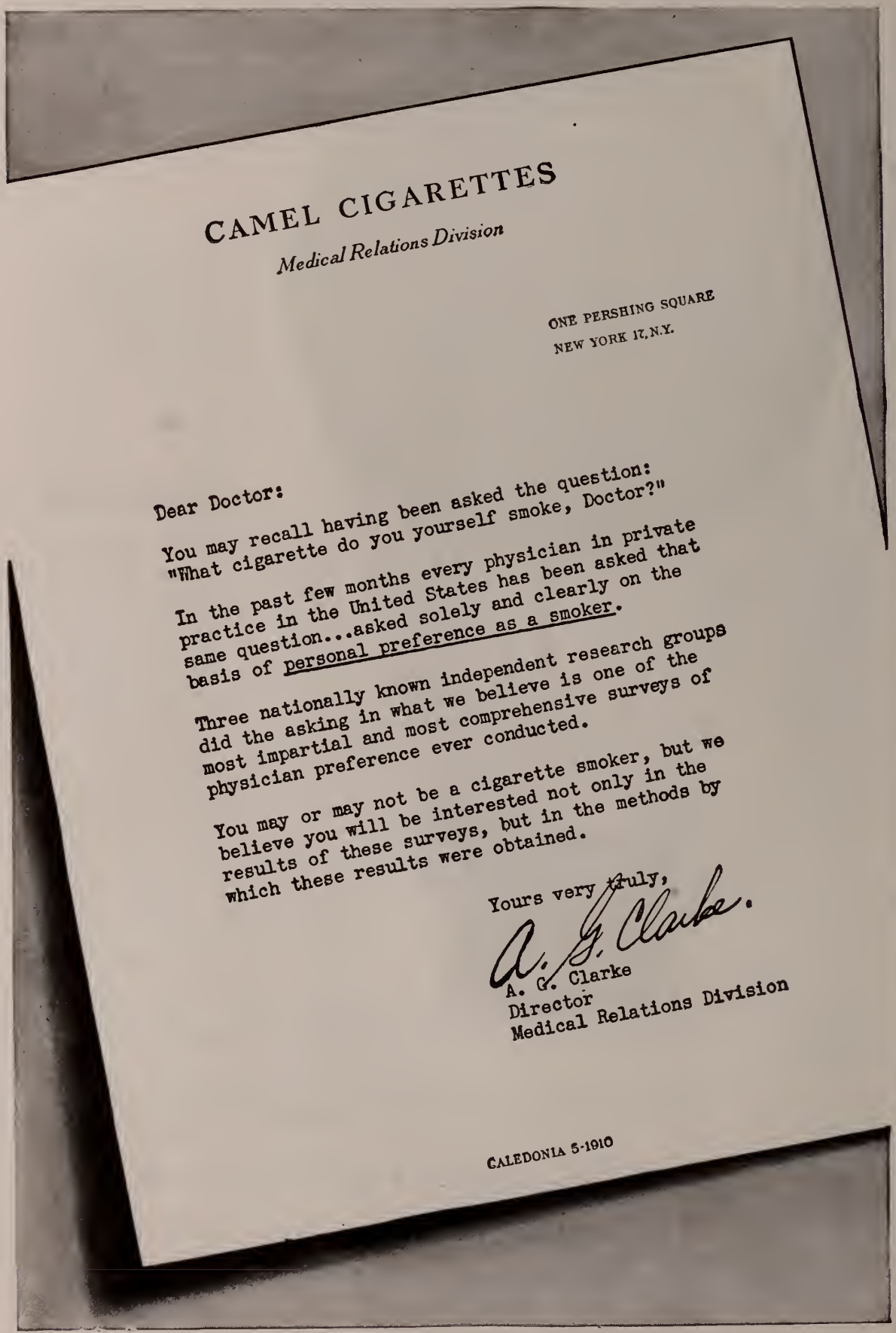
for the fifth time! An increase in potency—the fifth of its kind —continues to keep Unicaps abreast of the latest developments in multivitamin supplementation. Without any increase in price, the new formula of Unicap* Vitamins carries forward the concept of "effective supplementation at unexcelled economy." Because of the potency of the formula and other advantages, Unicaps remain the preference of prescribers, just as their economy makes them the preference of the users. Unicap Vitamins are available in bottles of 24, 100, 250 capsules.

*Trademark, Reg. U. S. Pat. Off.

UNICAP VITAMINS

Upjohn
KALAMAZOO 99, MICHIGAN

FINE PHARMACEUTICALS SINCE 1886 • FIGHT INFANTILE PARALYSIS — JANUARY 14-31



CAMEL CIGARETTES

Medical Relations Division

ONE PERSHING SQUARE
NEW YORK 17, N.Y.

Dear Doctor:

You may recall having been asked the question: "What cigarette do you yourself smoke, Doctor?"

In the past few months every physician in private practice in the United States has been asked that same question...asked solely and clearly on the basis of personal preference as a smoker.

Three nationally known independent research groups did the asking in what we believe is one of the most impartial and most comprehensive surveys of physician preference ever conducted.

You may or may not be a cigarette smoker, but we believe you will be interested not only in the results of these surveys, but in the methods by which these results were obtained.

Yours very truly,

A. G. Clarke.

A. G. Clarke
Director
Medical Relations Division

CALEDONIA 5-1910

A physician asked us the question first—

A smoker himself, he asked: "What cigarette do most doctors smoke?"

We know that many physicians smoke, that many of them prefer Camels; but we couldn't answer the doctor's query.

We turned the question over to three nationally known independent survey groups. For months these three groups worked . . . separately . . . each one employing the latest scientific fact-finding methods.

This was no mere "feeling the pulse" poll. No mere study of "trends." This was a nationwide survey to discover the actual fact . . . and from the statements of physicians themselves.

> *To the best of our knowledge and belief, every physician in private practice in the United States was asked: "What cigarette do you smoke?"*

The findings, based on the statements of thousands and thousands of physicians, were checked and re-checked.

ACCORDING TO THIS RECENT NATIONWIDE SURVEY:

More doctors smoke Camels than any other cigarette

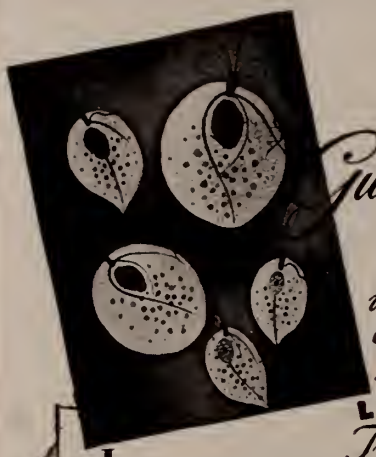


And by a very convincing margin!

Naturally, as the makers of Camels, we are gratified to learn of this preference. We know that no one is more deserving of a few moments to himself than the busy physician . . . of a few moments of relaxation with a cigarette if he likes. And we are glad to know that so many more physicians find in Camels the same added smoking pleasure that has made Camels such an outstanding favorite among *all* smokers.

CAMELS *Costlier Tobaccos*

R. J. Reynolds Tob. Co.
Winston-Salem, N. C.



Guiding Principles

in combating a common and stubborn cause of

LEUKORRHEA

Trichomonas vaginalis

In the treatment of trichomonas leukorrhea consideration should be given to extermination of the parasites, and to restoration of the normal vaginal flora.

Such a dual action is achieved through treatment with Devegan. Marked improvement is frequently observed within three or four days. The subsidence of the profuse, malodorous discharge is accompanied by a corresponding decrease of the intense local burning, itching and other discomfort. Even in chronic cases a cure may result in two or three weeks.

Devegan is applied in two forms: in powder and in tablets. The powder is insufflated into the vagina several times a week by the physician, while the patient is instructed to use the tablets at home. Later, when the discharge has been greatly reduced, the tablets alone are usually sufficient to complete the cure.

PAMPHLET GIVING DETAILED INFORMATION SENT ON REQUEST

Devegan Tablets are supplied in boxes of 25 and 250, each containing 0.25 Gm. of acetylaminohydroxyphenylarsonic acid.

Devegan Powder is available in bottles of 1 oz. and 8 oz.

WINTHROP

D E V E G A N

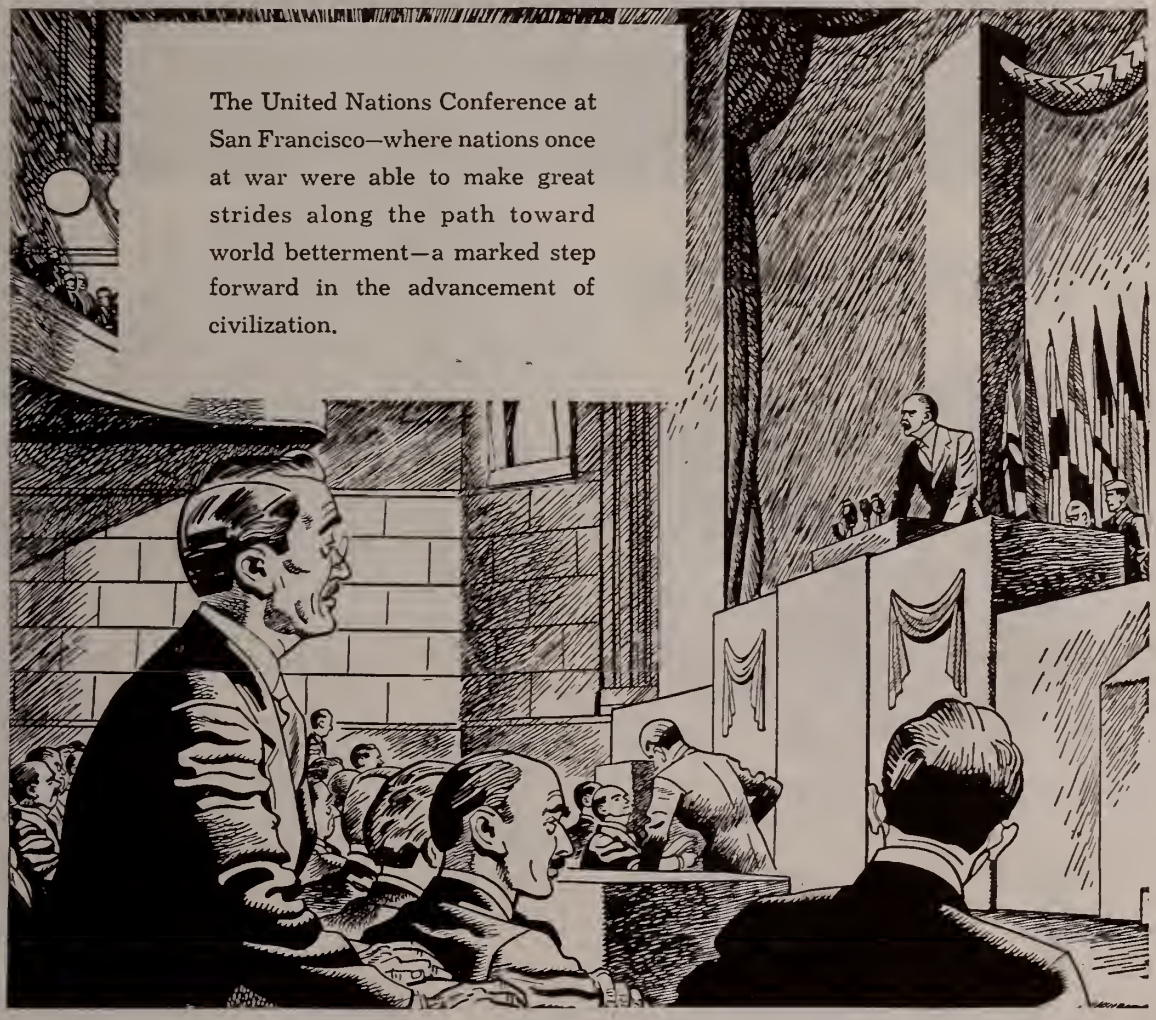
Trademark Reg. U. S. Pat. Off. & Canada

WINTHROP CHEMICAL COMPANY, INC.

Pharmaceuticals of merit for the physician

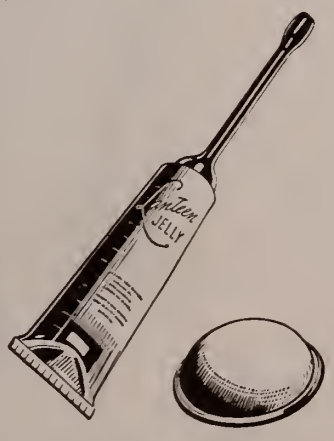
NEW YORK 13, N. Y. WINDSOR, ONT.

Toward a Better World



Looking forward as always, Lanteen Medical Laboratories present another notable example of advanced thinking, in Lanteen Products, leaders in their field, produced under the most rigid scientific standards.

Since patients are not mechanically minded, simplicity and ease of handling are prime requisites for continued use. Lanteen Flat Spring Diaphragm is extremely simple to place—it is collapsible in one plane only. No inserter required. Distributed ethically—advertised only to the medical profession—available only upon the recommendation or prescription of a physician. Complete information upon request.

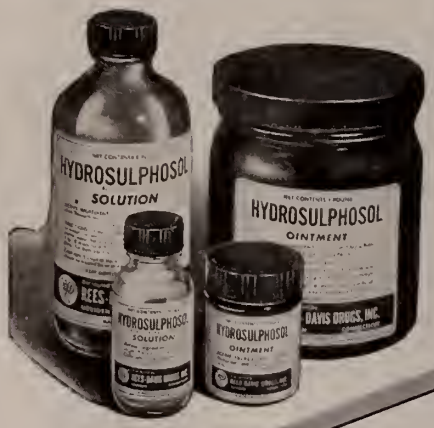


L A N T E E N

COPYRIGHT 1945, LANTEEN MEDICAL LABORATORIES, INC. CHICAGO 10

A Fundamental Approach
TO SULFUR METABOLISM

HYDROSULPHOSOL



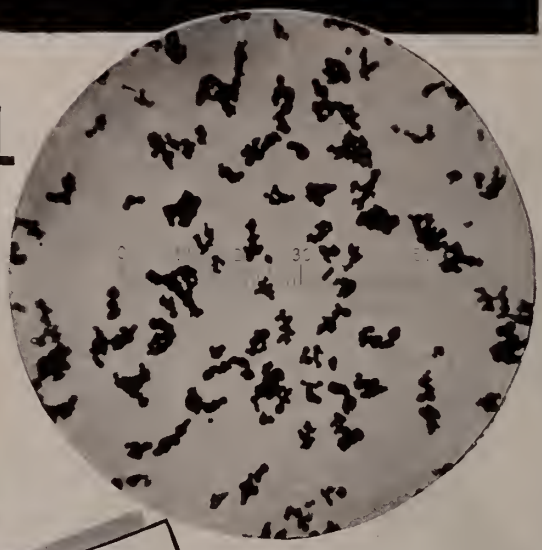


Illustration showing flowers of sulfur magnified 82X: small divisions = 10 microns. The size of the colloidal sulfur particle in Hydrosulphosol is estimated at 1/1000 of a micron or 1/10,000 of the small division particle illustrated.

A true solution of sulfur bearing compounds resulting solely from the reduction of flowers of sulfur by a catalytic process. In aqueous solution, it is capable of releasing its unusually high concentration of sulfhydryl ion in readily utilizable form . . . without evidence of toxic reaction.

Its therapeutic importance may best be evaluated by the fact that the —SH radical of the cysteine forms the active group in glutathione, alone of reported importance in connection with tissue oxidations.

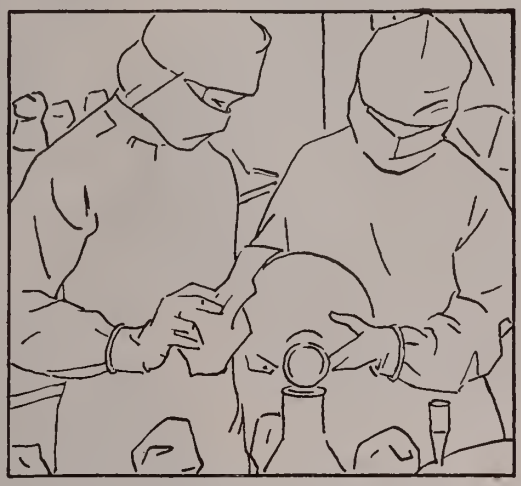
Hydrosulphosol is indicated in the management of burns, ulcers and pathological conditions in which sulfur metabolism is a clinical consideration.

Reprints of scientific papers by authoritative investigators available on request.

Rees-Davis Drugs, Inc.
MERIDEN, CONNECTICUT

PENICILLIN SCHENLEY CONTROL

here . . .



. . . insures your confidence

here



SCHENLEY LABORATORIES, INC.
Producers of Penicillin Schenley
Executive Offices:
350 Fifth Avenue, New York City

At the Schenley Laboratories, a system of control of vast proportions insures maximum purity, potency, and pyrogen-freedom for the end product which bears the label Penicillin Schenley.

Since its production is safeguarded with such skill and precision at every step, members of the medical profession can feel the greatest confidence when they specify Penicillin Schenley.

All the Factors Involved in Raising the Hemoglobin Level

IN secondary anemia, administration of iron alone rarely proves sufficient to promote rapid hemoglobin restoration. Clinical experience has shown that the efficacy of anemia therapy is measurably improved by supplying B vitamins in adequate amounts, in addition to highly available iron.

Livitamin presents: B-VITAMIN FACTORS occurring in fresh liver concentrate and rice bran, fortified with synthetic thiamine, riboflavin, niacinamide, pyridoxine, and pantothenic acid; IRON in highly available colloidal form, virtually free from untoward influence upon the gastrointestinal tract; LIVER (as liver concentrate), containing the liver-fraction in which the recognized antianemia principle is found.

When blood loss or destruction is excessive (hemorrhage, severe infections, etc.), when there is an increased demand upon blood-forming organs as in pregnancy, or when nutritional deficiencies result in hypochromic anemia, Livitamin supplies effective therapy directed against the various mechanisms involved.





Livitamin (a highly palatable liquid) is supplied in 8-oz. bottles

THE S. E. MASSENGILL COMPANY
Bristol, Tenn.-Va.

LIVITAMIN

NEW YORK • SAN FRANCISCO • KANSAS CITY

SEMCO



NITROBAR

IMPORTANT ACCOMPLISHMENTS in the treatment of essential hypertension:

1. gradual lowering of the blood pressure and a subsequent prolonged period of low pressure
2. relaxation of the patient's general nervous tension

The bismuth subnitrate (5 gr.) in Nitrobar is reduced in the intestine and thus provides a gradual stream of nitrite ions which relax the vessel walls and bring the blood pressure down in a long curve, maintaining this low level for a matter of hours.
The addition of phenobarbital ⅓ gr. together with ext. passiflora ½ gr. and ext. lupulus ½ gr. induces the "mental relaxation" necessary to relief of hypertension. Nitrobar Comp. is supplied in engestic coated red tablets. Caution: Use only as directed.

Bottles of 100, 500 and 1000

McNeil Laboratories
INCORPORATED
PHILADELPHIA • PENNSYLVANIA

The Preference is Overwhelming

A comprehensive report published in *Human Fertility*[1] shows an overwhelming preference by experienced clinicians for the "Diaphragm and Jelly" method of conception control.

The report covering 36,955 new cases shows that the diaphragm and jelly method was prescribed for 34,314, or 93%.

On the evidence supplied by competent clinicians we continue to suggest that for the optimum in protection the physician should prescribe the combined use of a vaginal diaphragm and spermatocidal jelly.

When you specify "RAMSES"* a product of highest quality is assured.

Gynecological Division
JULIUS SCHMID, INC.
Established 1883
423 West 55th Street New York 19, N. Y.

1. Human Fertility, 10:25, March, 1945.



*The word "RAMSES" is a registered trademark of Julius Schmid, Inc.

Doctor—Judge

PHILIP MORRIS suggests *you* judge . . . from the evidence of your own *personal* observations . . . the value of PHILIP MORRIS Cigarettes to your patients with sensitive throats.

PUBLISHED STUDIES* SHOWED WHEN SMOKERS CHANGED TO PHILIP MORRIS SUBSTANTIALLY EVERY CASE OF THROAT IRRITATION DUE TO SMOKING CLEARED COMPLETELY, OR DEFINITELY IMPROVED.

But naturally, no published tests, no matter how authoritative, can be as completely convincing as results you will observe for yourself.



PHILIP MORRIS

PHILIP MORRIS & CO., LTD., INC.
119 FIFTH AVENUE, NEW YORK, N. Y.

**Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154.*
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60.

TO THE DOCTOR WHO SMOKES A PIPE: We suggest an unusually fine new blend—COUNTRY DOCTOR PIPE MIXTURE. Made by the same process as used in the manufacture of Philip Morris Cigarettes.



"WELL, DOCTOR, I'D PUT THIS BABY ON DRYCO"

"His condition requires careful dietary supervision – with Dryco you can easily adjust the formula to meet his requirements."

Because Dryco offers the physician wide limits of formula flexibility, it is ideally suited to *special* feeding . . . besides being perfectly suited to *normal* cases. It may be prescribed with or without added carbohydrate . . . and may be employed in *concentrated* form also when indicated.

The high-protein, low-fat ratio of Dryco (2.7 to 1) assures optimum protein intake and minimal gastro-intestinal upsets from fat indigestion. In addition, Dryco contains adequate vitamins A, B_1, B_2, and D, plus essential milk minerals.

BORDEN'S PRESCRIPTION PRODUCTS DIVISION
350 MADISON AVENUE, NEW YORK 17, N. Y.

In Canada Write The Borden Company, Limited, Spadina Crescent, Toronto

DRYCO *is made from spray-dried, pasteurized, superior quality whole milk and skim milk. Provides 2500 U.S.P. units vitamin A and 400 U.S.P. units vitamin D per reconstituted quart. Supplies 31½ calories per tablespoon. Available at all drug stores in 1 and 2½ lb. cans.*

USE
DRYCO
THE "CUSTOM FORMULA"
INFANT FOOD



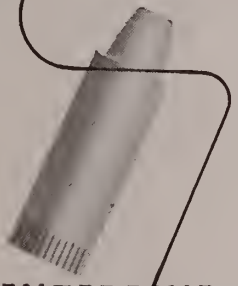
ACCEPTED
AMERICAN MEDICAL ASSN

a less irritating
vasoconstrictor—

"a benzedrine inhaler is probably the least irritating of any method for shrinking the nasal mucosa..."

Shambaugh, G. E., Jr.:
J. Iowa State Med. Soc. 31:373-377.

a better means of nasal medication



Benzedrine Inhaler, N.N.R., does not give rise to any significant degree of secondary turgescence, atony or bogginess, when used as directed. Furthermore, according to Proetz, it causes "no appreciable change in the amplitude or rapidity of the ciliary beat."
The Inhaler produces a shrinkage of the nasal mucosa equal to, or greater than, that produced by ephedrine.
Each Benzedrine Inhaler is packed with racemic amphetamine, S.K.F., 200 mg.; menthol, 10 mg.; and aromatics.
Smith, Kline & French Laboratories, Philadelphia, Pa.

BENZEDRINE INHALER

CHLOR-U-CAIN

Burn Therapy

Greatly Shortens Healing Time

CHLOROPHYLL 1%

Accelerates burn healing, shortens time by as much as 50%*. Minimizes scar formation and speeds regeneration of tissue.

UREA 33.2%

Exerts a solvent action that aids in removing necrotic tissue debris. Tends to minimize foul odors and prevent infection.

BENZOCAINE 10%

Because only slowly absorbed, remains localized at burn site to give sustained anesthetic action.

OINTMENT BASE

Vanishing, greaseless, washable, absorbent.

WARREN-TEED

Medicaments of Exacting Quality Since 1920

THE WARREN-TEED PRODUCTS COMPANY, COLUMBUS 8, OHIO

*"Chlorophyll Urea Ointment in the Treatment of Burns and Chronic Ulcers." Industrial Medicine, 14:9, 730, Sept., 1945.

REPRINT AVAILABLE ON REQUEST



Warren-Teed Ethical Pharmaceuticals: capsules, elixirs, ointments, sterilized solutions, syrups, tablets. Write for literature.

Table of Contents

JANUARY, 1946
VOL. 89, NO. 1

ORIGINAL ARTICLES
Para and Peri-Urethral Infections of the Female Urethra, *Erwin H. Roeser, M.D.* and *Herman L. Kretschmer, M.D.*, Chicago 16
Sterility, *W. C. Scrivner, M.D.*, East St. Louis ... 19
Clinical Evaluation of Serologic Tests for Syphilis in Eight Thousand Cases, *Joseph M. Lubitz, M.D.*, Chicago 20
Classification of Strabismus, *Arthur J. Strich, M.D.*, Chicago 25
Bismuth Subsalicylate in Oil the Treatment of Choice in Vincent's Angina, *Harry D. Grossman, M.D.*, Chicago 28
Hemochromatosis, *Hamilton R. Fishback, M.D.*, and *Frank H. Fowler, M.D.*, Chicago 30

EDITORIALS
Medical Care for All the People 1
The 1946 Annual Meeting 3
County Health Departments 4
Separation of Medical Officers from Service 5
Complimenting the Doctor 7
Report on Special Meeting of the House of Delegates 8

CORRESPONDENCE
Revised Examination Schedule 10
The Southeastern Surgical Congress 10
J. C. Leary Joins Science Research Firm 10

MEDICAL ECONOMICS
Indiana Plan, *Marie Wessels, M.D.*, Chicago 11

STATE DEPARTMENT OF PUBLIC HEALTH
The Searcy-Clabaugh Law, *Richard F. Boyd, M.D.*, M.P.H. 13
Division of Public Health Dentistry, Illinois Department of Public Health 15

PHYSICAL MEDICINE ABSTRACTS 33

INDUSTRIAL HEALTH
Canvas-Lined Gloves Cause Extensive Dermatitis . 36
Instrument Salvage Presents Serious Radium Hazard 36
Team Work for Better Health 37

MEDICINE AND THE ARMED FORCES
15,000 Physicians, 5,000 Dentists Made Eligible for Discharge 39
Secretary of War Orders Study on Doctors and Dentists Release Situation 40
Nebraska Representative Miller Praises Work of Medical Services 41
Army Exceeds Quota on Release of Doctors 41
New Course in Care of Artificial Limbs Inaugurated 41
Medical Department Personnel in ETO get Total of 22,304 Awards 42
Army to Release Twenty-Three Hospitals 42
New Chief Nurse at Gardiner General Hospital ... 42
1,250,000 Men Given Physical Examinations in October 42
Deferment and Deceleration in Medical Education . 43

NEWS OF THE STATE
Coming Meetings, Personals, Marriages, Deaths ... 44

You're Invited!

TO THE

ANNUAL CLINICAL CONFERENCE

PALMER HOUSE
CHICAGO
MARCH 5, 6, 7, 8

Sponsored by

CHICAGO MEDICAL SOCIETY

COOPER CREME

The Original Spermicidal Creme

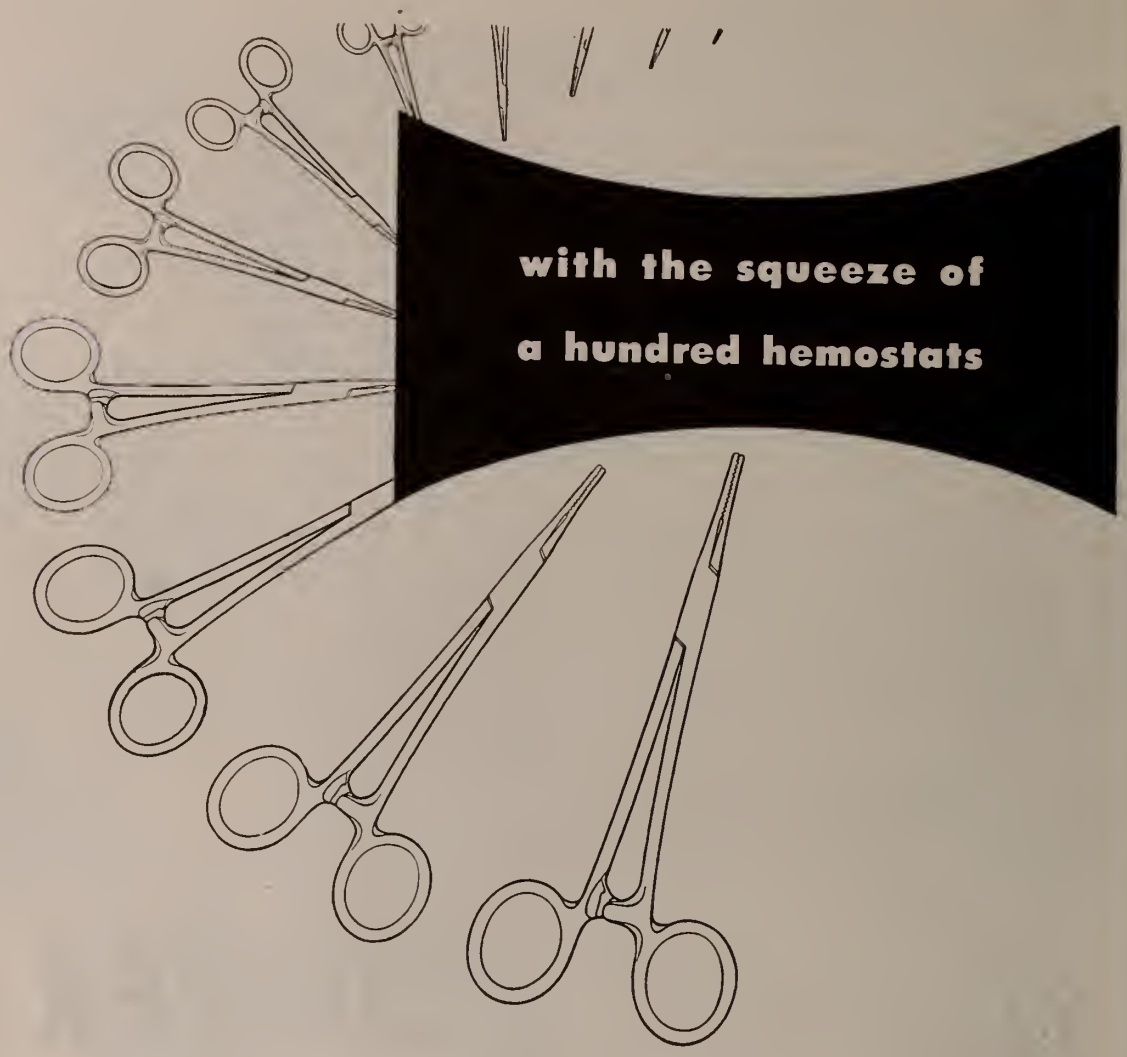
No Finer Name in Contraceptives. .

ACCEPTED AMERICAN MEDICAL ASSN. Council on Pharmacy and Chemistry

Active ingredients:
Trioxymethylene 0.04% Sodium Oleate 0.67%

Prescribed For Over A Decade

WHITTAKER LABORATORIES, INC.
PEEKSKILL, NEW YORK



'ERGOTRATE' (Ergonovine Maleate, U.S.P., Lilly), when injected intravenously, assures quick contraction of the postpartum uterus and tight compression of blood vessels at the placental site. 'Ergotrate' minimizes blood loss at delivery, protects against postpartum hemorrhage, lessens the possibility of postpartum infection. Also available in tablets for oral administration.

ELI LILLY AND COMPANY • Indianapolis 6, Indiana, U.S.A.



Uncertainty eliminated

The element of uncertainty is eliminated when liver extracts bearing the Lilly Label are properly employed in the treatment of pernicious anemia. Both Liver Extract Solution, Crude, Lilly, and Liver Extract Solution, Purified, Lilly, are standardized on patients with pernicious anemia in relapse and will produce a standard reticulocyte response when the recommended dosage is administered.

Liver Extract Solution, Crude, Lilly, is available in 1 U.S.P. unit per cc. and 2 U.S.P. units per cc. strengths. Liver Extract Solution, Purified, Lilly, is available in 15 U.S.P. units per cc., 10 U.S.P. units per cc., and 5 U.S.P. units per cc. strengths. Specify Lilly.

ELI LILLY AND COMPANY • INDIANAPOLIS 6, INDIANA, U.S.A.



ILLUSTRATION BY ANDREW LOOMIS

A boy, a picture, and a dream

CHOICE OF A LIFE WORK is often a matter of circumstance. Events that seem trivial at the moment may be destined to influence the lives of generations to come. When seventeen-year-old Eli Lilly paused to study a painting of the Good Samaritan hanging over a drug store, the parable which he had learned at his mother's knee recurred to him with fond nostalgic memory. The picture inspired Eli Lilly to choose pharmacy as a career and eventually led to the founding of Eli Lilly and Company. Then the smallest pharmaceutical plant in existence, now among the largest, the success of Eli Lilly and Company must be measured largely by economic standards. Through the seventy years of its existence, however, the spirit of the Good Samaritan has never ceased to be a guiding light.

Lilly

The Illinois Medical Journal

January, 1946

VOL. 89, NO. 1

Official Journal of the Illinois State Medical Society

EDITOR — Harold M. Camp. EDITORIAL BOARD — James H. Hutton, Chairman, Frederick H. Falls, Josiah J. Moore, Edwin M. Miller, Chauncey C. Maher, Harry S. Gradle, Harry Culver, Walter Stevenson, Raymond W. McNealy.

Editorials

MEDICAL CARE FOR ALL THE PEOPLE

In the December 1, 1945 issue of the Journal of the American Medical Association, an article was published entitled, "Medical Care For the American People", written by Louis H. Bauer, M.D., a member of the Board of Trustees of the A.M.A. and previously Chairman of the Council on Medical Service and Public Relations. The article should be read carefully by every physician in the country and it would be well worthwhile if every member of our legislatures, state and federal, would read it.

The author gives serious consideration to the availability of medical care of a high quality to every person in the United States, a statement frequently referred to by members of the Congress, and although we all agree that this should be the right of every citizen, methods by which this can be attained is the basis for the current controversy.

Dr. Bauer says, "As doctors we see the problem in a way no one else can possibly see it. It pertains to our daily work and we are naturally closer to it than any one else. One does not consult a doctor if one wishes to draw up a will. One goes to a lawyer. Neither does one consult a lawyer if one wishes to build a house. One goes to an architect. Yet there are many who think it is not necessary to consult the doctors on any problems related to medical care but that legislators, those engaged in social welfare and other laymen can draw up a complete program, have it adopted and then expect the doctors to make it work. It should be borne in mind that, no matter what system is eventually evolved in this country for delivering medical care, the doctor is the one who is going to have to deliver it. It cannot possibly be delivered by a "social uplifter." Hence it would be better for all concerned if the plan adopted is one which will enlist the cooperation and enthusiasm of the medical profession.

Another point usually lost sight of is that the mere delivery of a quantity of medical care is not solving the problem. The homeopathic precept that the more a thing is diluted the greater its effectiveness went into the discard long ago. What we want is not just more medical care but more medical care of a high quality.

The answer to any complex problem is usually not simple but also complex. So, in our problem of medical care, the answer is not a single one but a multiple one. Yet the Social Security Board and Senators Wagner and Murray and Congressman Dingell refuse to admit there is any possible answer but the single one of a national compulsory sickness insurance, regardless of the fact that nowhere has it been as satisfactory as our own system of private medical care.

A careful analysis of the situation would seem to indicate that there are certain elemental factors which are responsible for our problem. These factors are (1) improper distribution of

doctors, (2) lack of proper diagnostic facilities in certain areas, (3) the costs of illness — particularly so-called catastrophic illness — and (4) a general economic factor. These factors are closely related and cannot be considered separately. Why are certain areas devoid or short of doctors? There are two reasons. One is that certain areas are so sparsely settled that there is no attraction for a doctor, not only because he will have insufficient patients, but because there are no educational or social facilities for him to bring up his children. The other is really the second factor (namely, the lack of proper diagnostic facilities) so that he cannot practice good medicine. In the latter case he either leaves and goes elsewhere or else he does what to my mind is worse, he stays and practices poor medicine. With further reference to the lack of diagnostic facilities, this lack is usually because the community by itself cannot support the necessary facilities.

The third factor, the costs of illness, again is tied up partially with the second: availability or nonavailability of proper diagnostic facilities. The high cost of illness is not in ordinary intercurrent illness but in the cost of diagnosis in the more complicated illnesses, in hospitalization and in private nursing care. Also in sparsely settled areas the long distances a doctor may have to go increase the cost of his services. Still another important reason is the cost of care of the chronic invalid.

The fourth factor — the general economic one — is the matter of housing, clothing, nutrition and sanitation. This is a social problem of the community and not a medical problem, although the neglect of it results in an increase in the prevalence of disease and the necessity for medical care. The solution, however, is not the pouring in of medical care but preventing the necessity for it.

With this as a background, Dr. Bauer told how the American Medical Association proposes to solve the problem, referring to the 14-point program adopted jointly by the Board of Trustees and the Council on Medical Service and Public Relations on June 22, 1944. After presenting the preamble, he gave the 14-point pro-

ILLINOIS STATE MEDICAL SOCIETY

GENERAL OFFICERS, 1944-1945

PRESIDENT ..... EVERETT P. COLEMAN, Canton
PRESIDENT-ELECT ..... ROBERT S. BERGHOFF, Chicago
1ST VICE-PRESIDENT .... HARRY M. HEDGE, Chicago
2ND VICE-PRESIDENT .... WALTER C. BLAINE, Tuscola
SECRETARY-TREASURE .. HAROLD M. CAMP, Monmouth

THE COUNCIL

L. J. Hughes	1st	District, Elgin	1944
E. C. Cook	2nd	District, Mendota	1944
Oscar Hawkinson	3rd	District, Chicago	1946
Percy E. Hopkins	3rd	District, Chicago	1944
E. W. Mueller	3rd	District, Chicago	1945
Chas. P. Blair	4th	District, Monmouth	1946
Ralph P. Peairs	5th	District, Normal	1946
Walter Stevenson	6th	District, Quincy	1945
I. H. Neece	7th	District, Decatur	1946
C. E. Wilkinson	8th	District, Danville	1946
Andy Hall	9th	District, Mt. Vernon	1945
G. C. Otrich	10th	District, Belleville	1945
Ed. S. Hamilton	11th	District, Kankakee	1944
Edward H. Weld	At	Large, Rockford	1946
Chas. H. Phifer	At	Large, Chicago	1945
J. S. Templeton	At	Large, Pinckneyville	1944

Chairman of the Council ..... Percy E. Hopkins

ILLINOIS MEDICAL JOURNAL

Harold M. Camp, Monmouth ..... Editor
L. E. Malley, Chicago .... Managing Editor & Business Mgr.

GENERAL COUNSEL

Edward W. Rawlins ..... 77 West Washington St., Chicago

LEGISLATIVE COMMITTEE

James H. Hutton, Chairman .... 30 N. Michigan Ave., Chicago

EDUCATION COMMITTEE

R. R. Ferguson, Chairman .. 4013 N. Milwaukee Ave., Chicago
Miss Jean McArthur, Secretary .. 30 N. Michigan Ave., Chicago

PERMANENT COMMITTEE ON ARCHIVES

D. D. Monroe, Chairman ..... Alton
C. E. Black ..... Jacksonville
P. J. McDermott ..... Kewanee

SCIENTIFIC SERVICE COMMITTEE

Robert S. Berghoff, Chairman .. 30 N. Michigan Ave., Chicago
Harold M. Camp, Secretary ..... Monmouth

JOURNAL COMMITTEE

Percy E. Hopkins, Chairman ..... 800 W. 78th St., Chicago
Harry J. Stewart, Secretary ..... 715 Lake St., Oak Park

Outside of editorial or allied views or statements that are the authoritative actions of the Illinois State Medical Society, the organization denies responsibility for opinions and statements published in the ILLINOIS MEDICAL JOURNAL. Views expressed by the various authors and views set forth in various departments in the JOURNAL represent the views of the writers.

State Society will pay no bills for legal services except those contracted by the Committee. Notify the Chairman at once. Do not employ attorneys.

Send advertising copy, cuts and all communications relating to advertising to ILLINOIS MEDICAL JOURNAL, 30 N. Michigan Avenue, Chicago.

Original articles and membership correspondence to Dr. Harold M. Camp, Monmouth, Ill.

Society proceedings and news items and changes in the mailing list to Managing Editor, 30 N. Michigan Ave., Chicago 2, Illinois.

Subscription price of this JOURNAL to persons not members of the Illinois State Medical Society is $3.00 per year, in advance, postage prepaid, for the United States, Cuba, Porto Rico, Philippine Islands, Hawaiian Islands and Mexico. $4.00 per year for all foreign countries included in the postal union. Canada, $3.50. Single current copies, 50 cents.

gram and commented in much detail on each of these points. The preamble is as follows:

"The physicians of the United States are interested in extending to all people in all communities the best possible medical care. The Constitution of the United States, the Bill of Rights and the 'American Way of Life' are diametrically opposed to regimentation or any form of totalitarianism. According to available evidence in surveys, most of the American people are not interested in testing in the United States experiments in medical care which have already failed in regimented countries.

"The physicians of the United States, through the American Medical Association, have stressed repeatedly the necessity for extending to all corners of this great country the availability of aids for diagnosis and treatment, so that dependency will be minimized and independence will be stimulated. American private enterprise has won and is winning the greatest war in the world's history. Private enterprise and initiative manifested through research may conquer cancer, arthritis and other as yet unconquered scourges of humankind. Science, as history well demonstrates, prospers best when free and unshackeled."

The Program:

1. Sustained production leading to better living conditions with improved housing, nutrition and sanitation, which are fundamental to good health; we support progressive action toward achieving these objectives.

2. An extended program of disease prevention with the development or extension of organizations for public health service so that every part of our country will have such service, as rapidly as adequate personnel can be trained.

3. Increased hospitalization insurance on a voluntary basis.

4. The development in or extension to all localities of voluntary sickness insurance plans and provision for the extension of these plans to the needy under the principles already established by the American Medical Association.

5. The provision of hospitalization and medical care to the indigent by local authorities under voluntary hospital and sickness insurance plans.

6. A survey of each state by qualified individuals and agencies to establish the need for additional medical care.

7. Federal aid to states where definite need is demonstrated, to be administered by the proper local agencies of the states involved with the help and advice of the medical profession.

8. Extension of information on these plans to all the people with recognition that such voluntary programs need not involve increased taxation.

9. A continuous survey of all voluntary plans for hospitalization and illness to determine their adequacy in meeting needs and maintaining continuous improvement in quality of medical service.

10. Discharge of physicians from the armed services as rapidly as is consistent with the war effort in order to facilitate redistribution and relocation of physicians in areas needing physicians.

11. Increased availability of medical education to young men and women to provide a greater number of physicians for rural areas.

12. Postponement of consideration of revolutionary changes while 60,000 medical men are in the service voluntarily and while 12,000,000 men and women are in uniform to preserve the American democratic system of government.

13. Adoption of federal legislation to provide for adjustments in draft regulation which will permit students to prepare for and continue the study of medicine.

14. Study of postwar medical personnel requirements with special reference to the needs of the veterans' hospitals, the regular army, navy and United States Public Health Service.

This is one of the most important articles which has appeared on the subject of medical care for all the American people, and it should be used freely in discussing the present-day problems with legislators and other lay friends everywhere.

THE 1946 ANNUAL MEETING

The 1946 annual meeting of the Illinois State Medical Society will be held at the Palmer House, Chicago, May 14, 15, 16. All section officers, committees, the Council and officers of the State Medical Society are working diligently to make this first post-war meeting a highly successful one. Plans are being developed to have more general sessions for this meeting than at previous ones, and all programs will be ar-

ranged so that they will appeal to the physicians in general practice.

As is usually the case at the annual meetings, there will be the fine technical exhibit conducted in the large exhibition hall. Once more all booths will be occupied by those concerns which have aided materially in the recent progress of medicine. Also there will be a fine display of scientific exhibits which will be of much interest to those attending the meeting. These exhibits will show many of the war-time developments in scientific medicine in various branches.

With many hundreds of Illinois physicians now being separated from service, and many more to come home during the coming months, all of them will receive a generous welcome at the meeting, and will be expected to participate freely in the deliberations.

Information concerning the annual meeting will appear in succeeding issues of the Illinois Medical Journal, and it is hoped that the membership of this Society as a whole will plan to come to the meeting next May.

The following officers for the several sections are arranging the scientific programs, and physicians desiring to present papers at this 1946 annual meeting should confer with the proper section officers.

SECTION OFFICERS

SECTION ON MEDICINE
L. E. Hines, Chmn., 104 S. Michigan, Chicago
W. H. Newcomb, Secy., Jacksonville

SECTION ON SURGERY
G. E. Johnson, Chmn., 1000 W. 59th St., Chicago
J. B. Moore, Secy., Benton, Illinois

SECTION ON EYE, EAR, NOSE & THROAT
Beulah Cushman, Chmn., 25 E. Washington St., Chicago
H. L. Ford, Secy., Champaign

SECTION ON PUBLIC HEALTH & HYGIENE
E. A. Piszczek, Chmn., 737 S. Wolcott Ave., Chicago
Richard F. Boyd, Secy., Springfield

SECTION ON RADIOLOGY
P. R. Dirkse, Chmn., St. Francis Hosp., 530 N. Glen Oak, Peoria
Frank L. Hussey, Secy., 250 E. Superior St., Chicago

SECTION ON PEDIATRICS
John F. Carey, Chmn., Joliet
G. N. Krost, Secy., 2376 E. 71st Street, Chicago

SECTION ON OBSTETRICS & GYNECOLOGY
J. P. Greenhill, Chmn., 55 E. Washington St., Chicago
E. N. Nash, Secy., Galesburg

SECTION ON PATHOLOGY
Otto Saphir, Chmn., 2839 Ellis Avenue, Chicago
M. C. Corrigan, Secy., 2839 Ellis Avenue, Chicago

COUNTY HEALTH DEPARTMENTS

During recent months, officers of the Illinois State Medical Society have received a number of letters asking if the Society has ever given approval to the Searey-Clabaugh County Health Department Law permitting individual counties or adjoining counties to establish their own health department. Although reference has been made in the columns of this Journal previously on that subject, we are pleased to review this subject once more, and bring it up to date by showing the reactions since the law was enacted.

Since the enactment of the Searcy-Clabaugh County Health Department Law by the State Legislature in 1943, the State Department of Public Health with the help of the State-wide Public Health Committee has actively engaged in the promotion of autonomous county and multiple county public health departments. The action of the department is based on the sound conviction that well-organized, full-time county health departments staffed by well-qualified personnel constitute the solution to many problems created by the lack of sanitation, uncontrolled communicable diseases and poor health habits. To date, fifteen counties, all with the concurrence of the county medical societies, have taken advantage of this relatively new law, and of this group thirteen are now functioning while two are in the process of organization. It is anticipated that about twenty more counties will follow their example within the next two or three years.

Although such action by the State Department of Public Health is most commendable, the development of public health facilities within

the county is viewed with suspicion by some physicians as another form of "socialized or State medicine", or at least as something that might interfere with the recognized practice of medicine. *Such is not the case.* The functions of public health have long been accepted by the medical profession and are designed to supplement, not to replace or interfere with, the services rendered by private practitioners. Public Health and socialized medicine are not synonomous.

That the development of full-time health departments is a sound measure in accord with the medical profession is evidenced by action of the House of Delegates of the American Medical Association when on June 10, 1942, it unanimously voted its approval of the extension of public health services. In an editorial appearing in the Journal of the American Medical Association, April 3, 1943, specific mention is made of the Illinois law enabling counties to establish their own health departments. Here it is pointed out "that the people of Illinois may well reflect on the importance of this proposal, establishing as it does the framework on which may be constructed a comprehensive public health program to function in the interest of the health of all people of the State."

Similarly, the Council of the Illinois State Medical Society not only had a part in the formulation of the Scarcy-Clabaugh Law but has gone on record as endorsing the county health unit as being probably the most efficient method of providing health protection. It also keeps local public health problems under local control rather than that of the federal or State government.

Component county medical societies, of course, are free to formulate their own policy as to supporting the establishment of county health departments. Before a definite stand is taken, however, it is their responsibility to study thoroughly the functions and advantages of public health services. Once these are understood, the local medical society should take a place of leadership in helping to secure the best possible public health services for the community.

The State Department of Public Health has prepared for circulation a pamphlet, "About County Health Departments," (Health Circular No. 199) in which pertinent information concerning the problem in Illinois is presented. All physicians are invited to write to the Illinois State Medical Society, 30 North Michigan Avenue, Chicago 2, Illinois, (or to the State Department of Public Health, Springfield, Illinois) for a copy of this pamphlet in which will be found answers to questions which will clear any misunderstandings on this subject.

SEPARATION OF MEDICAL OFFICERS FROM SERVICE

The following physicians, whose names have not heretofore been published in this publication, have been separated from the service and so reported to the office of the Secretary as of January 1, 1946.

DOWNSTATE

Abbott, Orville L., Bloomington
Ahlm, Charles E. F., West Frankfort
Axelrod, David, Peoria
Bailis, Jack M., Pittsfield
Balcke, Louis A., Pekin
Ball, Wilbur G., Bloomington
Ballou, John W., Rushville
Barbour, Ben H. Jr., Centralia
Baughman, Jack L. East St. Louis
Baumgart, Edward T., Danville
Bell, Anthony J., Rock Island
Boeke, Emmert G., Winslow
Bonnell, Ellis, Champaign
Boon, Clifton U., Aurora
Bothe, Russell T., Aurora
Bovik, Leslie E., Waukegan
Bowen, Wilbur L., Peoria
Bratude, Amos P., Antioch
Brenner, Frank T. Jr., Quincy
Brobst, Charles D., Aurora
Brooks, Levis C., Freeport
Buehrig, Robert C., Minier
Bunchman, Lester P., Orangeville
Burack, Samuel, Kankakee
Burroughs, Oscar J., Dongola
Carter, Clifford L., Ottawa
Conklin, Charles A., Bloomington
Costigan, Clarence S., Moline
Crout, George T., Flanagan
Deering, David M., Antioch
DeVries, Jerry, Marseille
Dickey, Marvin M., Richmond
Ditkowsky, Sol P., Normal
Dollear, H. A., Jacksonville
Eilert, William G., Aurora
Einhorn, Harold, Champaign
Ernest, Dwight M., Peoria
Errico, Silvio, Moline
Fahrner, Richard H., Joliet
Fink, Frederick, Springfield
Fliesser, Werner, Hoopeston
Fruin, Leon Thomas, Normal

Gannon, Paul A., Pontiac
Gianturco, Cesare, Urbana
Giffen, Lewis A., Alton
Gillespie, James B., Urbana
Graham, John Philip, Knoxville
Green, Frank C., Chillicothe
Greene, Bernard L., Elgin
Hall, Marshall W., Mt. Vernon
Helm, John E., Benton
Herrmann, Ross E., Bradford
Hoeffding, Waldemar, Paris
Houghton, Earl J., Peoria
Hughes, Edgar O., Washington
Hume, Albert T., Monticello
Iknayan, Herbert A., Charleston
Irwin, Francis G., Decatur
Johnson, Lowell R., Danville
Joss, Edward F., Dwight
Kaske, Gordon J., Belvidere
Kearns, Owen A., Rockford
Knaus, William E., East St. Louis
Landmann, Paul E., Joliet
Lassar, Gilbert N., Springfield
Lattuada, Henry P., Danville
Law, Otis H., Pontiac
Leach, John E., Mendota
Lennarson, Vincent, Waukegan
Livingston, A. E., Bloomington
Magnelia, August L., Rockford
Maley, William F., Galesburg
Marquardt, Theodore R., Lombard
Martin, Albert G., Aurora
Marvel, Wiley R., Weldon
Mason, John C., Rossville
Mathis, John A., Pinckneyville
McClay, Elmo T., Springfield
McDowell, Mordecai M., Danville
McHarry, John W. Jr., Havana
McMorrow, Thomas R., Peoria
McRae, Louis A., Springfield
McVety, Thomas W., Decatur
Miller, Charles H. Jr., Springfield
Miller, Howard R., Peoria
Moore, Jean W., Danville
Moore, Rollin S., Streator
Mullen, Timothy F., Seneca
Musick, Rowland H., Mendota
Parker, George M., Peoria
Probasco, John L., Rockford
Puchett, Francis L., Stonington
Puestow, Charles B., Highland Park
Rayson, Edwin H., Earlville
Rhea, Keith, Clinton
Roberson, William V., Woodriver
Roberts, Jack, Lockport
Rosenberg, Jack, Aurora
Rutherford, Robert B., Peoria
Ryan, David C., Peoria
Sanders, Zal H., Rock Island
Sargent, William F., Salem
Saxon, Michael R., Oswego
Scudieri, Carmen F., South Wilmington
Seaton, Ralph M., Morrisonville
Sellett, Leonard V., La Salle
Sexton, George A., Monticello
Sharrer, Gerald L., Aurora
Shaw, Jesse W. Jr., Carbondale
Slaw, Adam, Delavan
Sloan, Howard P., Bloomington
Smith, William B., Grand Ridge
Stanelle, Wilbur F., New Shawneetown
Stephen, Robert J., Joliet
Stevens, John W., DuQuoin
Stewart, Frederick Jarratt, Kewanee
Stoll, Charles G., Lawrenceville
Sutton, Robert M., Peoria
Taylor, Owen H., West Frankfort
Thomas, E. W., Roodhouse
Trotter, Jay Donald, Carthage
Vass, Alajos, Springfield
Wallin, Bruce J., Rockford
Ward, Carl Fletcher, Pontiac
Weimer, James I., Pekin
Weinfeld, Gustave F., Highland Park
Weintraub, Jerome, Lincoln
Wilson, Clyde S., Belleville
Wyngarden, Clarence B., Wheaton
Zmugg, Andrew J., Aurora

COOK COUNTY

Abrams, Irving R., 1336 Estes Ave.,
Allen, Robert A., 750 Hinman, Evanston
Baker, Philip M., 7618 S. Kingston
Bass, Howard H., 9 S. Kedzie Ave.
Belmonte, John Virgil, 1230 N. Massasoit Ave.
Benjamin, Eustace L., 830 Lincoln Ave., Evanston
Block, Arnold S., 14 W. Elm St.
Bloom, Charles Robert, 1331 S. Austin Blvd.
Boersma, Donald, 10657 Wentworth Ave.
Bolla, Elder Lawrence, 9224 Cottage Grove
Brosnan, John J., 8225 South Calumet Ave.
Brown, Seth Edwin, 222 Burnham Pl., Evanston
Bunata, Emil J., 1810 Clarence Ave., Berwyn
Cohen, Bernard M., 2842 N. Sheridan Rd.
Cohrs, Clarence C., 1022 Douglas, Flossmoor
Conley, Thomas J., 35 Prospect, Park Ridge
Coyle, Joseph T., 7842 Cregier Ave.
Dalhberg, Andrew Victor, Jr., 8015 Luella Ave.
David, Charles Brown, 1436 Warner Ave.
Del Chicca, Silvio, 25 E. Washington St.
Deutsch, J., 1200 Pratt Blvd.
Doescher, Paul Fred, 211 N. Elmwood, Oak Park
Douglass, Thomas C., 72 W. Adams S.
Erikson, Herbert B., 8626 Ingleside
Epstein, J. M., 4140 Drexel Ave.
Faulkner, Harry L., 2051 Sedgwick St.
Feinhandler, Harold S., 3737 W. Wilson Ave.
Fioretti, Carlo A., 8335 Merrill Ave.
Fitzgerald, Maurice D., 1434 Hood Ave.
Fleischmann, Justin, 5040 Kenmore Ave.
Fond, Israel, 6334 N. Claremont Ave.
Friedberg, Stanton A., 455 Barry Ave.
Goodman, Clifford S., 420 Surf St.

Green, Martin W., 809 No. Lamon Ave.
Guerrieri, John A., 5202 Wolfram St.
Gunther, Aaron, 3403 W. Lawrence Ave.
Haraburda, Stanley V., 8357 Marquette Ave.
Hipskind, Myron M., 6901 Paxton Ave.
Hoebel, Frederick C., 303 E. Superior St.
Hofrichter, Frank C., 2318 S. Marshall Blvd.
Hurwitz, Paul, 25 E. Washington St.
Jana, Edward C., 3335 W. 26th St.
Jeffries, Milo Easton, 29 E. Madison St.
Jesser, Joseph H., 522 Cornelia Ave.
Joffe, Herman, 6956 N. Ashland Ave.
Johnson, William E. G., 7811 Euclid Ave.
Kahn, David, 5748 Drexel Ave.
Kapov, Kozme Francis, 5447 S. Union Ave.
Kapustka, Edward J., 2922 W. 43rd St.
Karras, S. J., 105 N. 18th Ave, Melrose Park
Kass, Harold M., 5501 W. Congress St.
Knowles, Donald B., 7409 S. Clyde Ave.
Langdon, Roy M., 1555 W. 79th St.
Laufman, Harold, 5750 Kenwood Ave.
Leavit, Samuel Sheldon, Orland Park, Ill.
Ledoux, Alfred Campbell, 1211 Mulford St., Evanston
Lemberg, David A., 2900 W. Fitch Ave.
Lerner, David G., 30 North Michigan Ave.
Leshin, Arno, 5474 Everett Ave.
Levan, Arthur B., 104 S. Michigan
Levin, Harry, 1146 Columbia Ave.
Lindberg, Howard Avery, 7350 Crandon Ave.
Lock, Frank, 6000 Waveland Ave.
Lubin, Jerome J., 3201 W. 63rd St.
Lundy, Clayton J., 543 Edgewood Pl., River Forest
McGuire James P., 4554 Broadway
McMillan, J. Charles, Jr., 1011 Lake St., Oak Park
Mackoff, Herman, 6600 S. Sacremento
Mahoney, Joseph M., 8245 S. Laflin
Majarakis, James, 620 E. 81st St.
Mennella, James Vincent, 4949 Belle Plaine Ave.
Mizock, Albert, 2000 W. 51st St.
Murphy, Frank G., 2567 E. 72nd St.
Nadeau, Oscar E., 2051 Sedgwick St.
Neiman, Benjamin Harold, 901 N. Euclid Ave., Oak Park
Neims, Irving M., 1 North Crawford Ave.
Nelson, Melvin Joseph, 4331 Schubert St.
Newcomb, A. L., 430 8th St., Wilmette
Norak, Walter Vincent, 544 S. 22nd Ave., Bellwood
Overby, Rudolph William, 7105 Stewart
Pallasch, Gervaise P., 1541 W. Division St.
Patchen, Paul J., 2536 E. 73rd St.
Pava, Charles, 1414 W. Pratt Blvd.
Pilot, Isadore, 507 Briar Pl.
Pope, Charles Evans, 636 Church St., Evanston
Post, John, 1477 Scott Ave., Winnetka
Rambar, Alwin C., 1525 E. 53rd St.
Ranquist, Robert C., 10632 S. Hoyne Ave.
River, Louis P., Jr., 318 Linden Ave., Oak Park
Rosenthal, Morris M., 3831 N. Keystone Ave.
Ross, Perry W., 5426 Sheridan Rd.
Rubens, Eli, 1331 E. Victoria, S. Bend, Ind.
Rubin, Simon S., Erie National Bank Bldg, Gary, Ind.
Rushakoff, Oscar, 2659 W. Augusta Blvd.
Ryan, Lawrence D., 615 Deming Pl.
Sanfilippo, G. James, 5125 W. Division St.
Saphir, William, 6747 Merrill Ave.
Schaefer, Joseph E., Illinois Athletic Club
Schoenwetter, Arthur H., 7521 N. Sheridan Rd.
Schultz, Abraham, 538 Hawthorne Pl.
Seid, Ben, 185 N. Wabash Ave.
Sheehan, Edward C., 157 N. Leamington Ave.
Shinglman, Willard E., 4930 W. 13th St., Cicero
Shurtz, William G., 22 E. 79th St.
Sideman, Sidney, 609 Stratford Pl.
Simons, Morton, 4010 W. Madison St.
Slattery, Thomas, 1140 Berwyn Ave.
Smith, Durand, 30 N. Michigan
Strohl, E. Lee, 122 S. Michigan Ave.
Sugar, Hyman Saul, 58 E. Washington St.
Toman, Andrew John, 2800 S. California Ave.
Tosney, Harold J., 700 Bellwood Ave., Bellwood
Turner, Samuel, 30 N. Michigan Ave.
Van Wien, Stefan, 7010 Clyde Ave.
Vermeren, John C., 4753 Broadway
Wade, Chester, 3251 W. 61st Pl.
Wajay, Louis A., 3040 N. Cicero Ave.
Waldman, Leonard F., 5514 N. Long Ave.
Wallheiser, Laverne Myron, 7135 East End Ave.
Weihe, Arthur R., 505 S. Oak Park Ave., Oak Park
Weissbuch, Mitchel R., 4857 N. Harding Ave.
Welsh, Raphael J., 30 N. Michigan Ave.
Williams, Ernest B., 5528 S. Blackstone Ave.
Zimmerman, Leo M., 5205 Dorchester Ave.

COMPLIMENTING THE DOCTOR

In a recent release from the Children's Bureau, U. S. Department of Labor, statistics were released showing the remarkable improvement in maternal and infant mortality for the United States during the past decade. This was the first comparative study of the nation's birth records over a period of ten years, according to Dr. Martha N. Eliot, Associate Chief of the Bureau, for prior to 1933, data for such a comparative statistical review covering all of the states were not available.

In the ten-year period from 1933 to 1943, the birth rate rose 30%, the infant mortality rate was reduced almost one-third while the maternal mortality rate was slashed more than one-half. "The infant mortality rate was reduced from 58 to 40 deaths per 1,000 live births, and in the same period the maternal mortality rate dropped from 62 to 24 deaths per 10,000 live births, a decline of 61%."

According to Dr. Eliot, "The major credit for this remarkable record goes to the doctors, those in private practice and in public service, for the

work they have done in their care of women during pregnancy, and the improved care they are able to give at childbirth, after delivery, and in the dangerous early days and months of the baby's life. Improvements in hospital care also come in for a large part of the credit."

The article states that far more babies are born in hospitals than ever before; in 1943, 72% were born in hospitals, while in 1933 it is estimated that approximately 35% were born in hospitals. In Connecticut 97.3% of the babies are being born in hospitals; while in Mississippi in 1943, only one out of four were born in hospitals. In 1933, infection was the cause of one out of four maternal deaths, while in 1943 less than one out of ten was due to that cause. With the free use of the sulfa and allied drugs, increased use of blood transfusions as well as the trend away from operative delivery, according to Dr. Eliot, this remarkable improvement has been made possible.

Although giving much credit to the extension of maternal and child health services in the Social Security Act, we would like to add another factor which, in Illinois, has aided materially in the improvements in maternal and infant mortality statistics, the functioning of a highly capable Maternal Welfare Committee within our own State Medical Society. This committee meets frequently and makes available in all communities of the state informative releases for mothers and prospective mothers as well as conducting hundreds of meetings where similar information is given to these women. This unquestionably has been of much service to the people of Illinois.

Although it is true that hospitals are usually the safest place for women to become mothers, many babies will no doubt be born in the home for some time to come. The family physician who has attended many hundreds of women in the home will continue to give the best possible service under drying conditions, and will have at their disposal many accessories which were not available prior to 1933, including the sulfa drugs, and in many instances, plasma, or equipment to give when needed, the life saving whole blood as transfusions.

With the many meetings throughout the state of Illinois in recent years, with papers scheduled on important subjects in obstetrics, and with the refresher courses made available for country practitioners who do obstetrical work and which have been attended by many of these men, we still believe that rural obstetrics in Illinois is not nearly so bad as many have painted it in recent years.

REPORT ON SPECIAL MEETING OF THE HOUSE OF DELEGATES HELD JANUARY 6, 1946

A special meeting of the House of Delegates of the Illinois State Medical Society was held in Chicago on January 6, 1946. A short report regarding the meeting is given herewith, and a more detailed abstract of the business of the meeting will be carried in the next issue.

The special meeting was called to consider certain problems, which were deemed of such great importance as to require the immediate attention and action of the House of Delegates. The matters considered were, first: the establishment in Illinois of a voluntary plan for the prepayment of medical and surgical expense, and second: the submission to the U. S. Veterans' Administration of a plan whereby war veterans may be treated for service connected disabilities in their home communities and by civilian physicians of their own choosing.

At the December 16, 1945 meeting of the Council, the Committee for the Study of Prepayment Plans for Medical and Surgical Care, of which Dr. Charles H. Phifer is chairman, reported and recommended that there be established at once a plan for voluntary prepaid medical and surgical care, to be underwritten by such commercial insurance carrier or carriers as may agree to conform to certain standards fixed by the Society. The committee's report was approved by the Council, as well as the committee's recommendation that a special meeting of the House of Delegates be called for the purpose of passing upon the report. Both the committee and the Council felt that although ample authority had been conferred upon the Council to institute a prepayment plan without further action of the House of Delegates, the proposed step would be one of such great and far-reaching importance to the physicians of Illinois, that it should be considered by the House before being placed in operation. This seemed especially important and desirable in view of the fact that no

HOUSE OF DELEGATES (Continued)

plan for prepaid medical care could possibly succeed without the understanding, approval and support of the men who will render the medical service thereunder.

The Committee's principal recommendations to the House of Delegates, briefly, were: that a prepayment plan be at once established with the approval and endorsement of this Society; that for the present, the plan be a cash indemnity plan underwritten by approved commercial insurance carriers, rather than a service plan operating under the enabling legislation passed at the 1945 session of the Illinois General Assembly; that study continue as to the feasibility of establishing a full coverage service plan for families in low income groups; and that all members of the Society do their utmost to cooperate and help the plan, when established, to succeed.

The House was addressed by F. L. Feierabend, M.D., of Kansas City, Missouri, who directs the operation of Surgical Care, Inc., the medical and surgical service plan which serves Kansas City and adjacent areas. Dr. Feierabend spoke forcefully and with great conviction in favor of the not-for-profit service plan in preference to the cash indemnity commercially underwritten plan proposed by the Committee, and it was on this question that the discussion of the House was primarily centered. The arguments for and against the two types of plans are too numerous and lengthy for the purpose of this report, but will be discussed in subsequent issues of this Journal.

The House voted to approve the committee's report and recommendation, and directed the Council to take further immediate action to place the approved plan into operation as soon as possible.

It should be noted that the plan adopted will in no way change the established relationship between physician and patient. The physician will have no contractual relationship with the insurance carrier or carriers, unless he sees fit to take from his patient an assignment of the sums due or to become due under the policy. The carriers will, in the absence of an assignment, be under no obligation to pay all or any part of the physician's bill. On the other hand, the indemnities provided for in the patient's policy will not in any way fix or limit the physician's charge, nor alter his right to discuss and fix by agreement with the patient the fees to be charged. It should also be noted that the action of the House in approving the plan is without prejudice to local or county plans which may now be in operation.

The House also approved a plan prepared by instruction of the Council, whereby war veterans may receive treatment for service connected disabilities by their own civilian physicians and in their own communities. Similar plans are in various stages of development in other states, and when operative, should limit very substantially the number of hospitals and medical officers the Veterans' Administration will be obliged to maintain. The fee schedule under which the plan is to operate is generally considered a most liberal one. It is now undergoing a final revision by the Council, in consultation with physicians engaged in the various specialties affected.

DO YOU BIND YOUR JOURNAL?

Those of our readers who have their copies of the Journal bound omitting the advertising section, and using only the center editorial section, will find that the November issue will not be usable.

Because of an error in locking up the forms, the editorial section is not in the exact center of the magazine, and the last 12 pages of that section cannot be bound. We are having these 12 pages reprinted and will send one to everyone requesting it.

Send a penny postcard to the Journal at 30 N. Michigan, Chicago 2, for your copy.

If you customarily bind the complete issues, you will not need this section.

Correspondence

REVISED EXAMINATION SCHEDULE

Due to transportation difficulties the examination of the Board, originally scheduled for Los Angeles, January 28th to 31st has been changed to San Francisco, June 22nd to 25th, inclusive, 1946.

In 1946 examinations will be held in Chicago, January 18th thru 22nd; New York, April, approx. 10th thru 13th; San Francisco, June 22nd thru 25th; Chicago, October 9th thru 12th.

The officers for 1946 are: Chairman, Edward C. Ellett, Memphis; Vice Chairman, Georgiana D. Theobald, Oak Park, Ill.; Secretary-Treasurer, S. Judd Beach, Portland, Maine; Assistant Secretary, Theodore L. Terry, Boston; Consultant, Walter B. Lancaster, Boston.

List of Surgery: A new ruling requires that previously accepted candidates mail their lists of surgery to the Board office at least sixty days prior to their examination. All new applicants are now required to send their list with application.

THE SOUTHEASTERN SURGICAL CONGRESS

The Southeastern Surgical Congress will hold its next Assembly at Memphis, Tennessee, March 11, 12, 13, 1946 at the Peabody Hotel.

The following is a partial list of those who will take part on the program: Dr. Conrad G. Collins, New Orleans; Dr. Merrill N. Foote, Brooklyn; Dr. Clarence E. Gardner, Durham; Dr. James E. Hemphill, Charlotte; Dr. Robert Hingson, Jr., Staten Island; Dr. Arnold Jackson, Madison, Wis.; Dr. Roy R. Kracke, Birmingham; Dr. Karl A. Meyer, Chicago; Dr. J. O. Morgan, Gadsden; Dr. Curtice Rosser, Dallas; Dr. Harold E. Simon, Birmingham; Dr. G. L. Simpson, Greenville, Ky.; Dr. Horace G. Smithy, Charleston, S. C.

The Medical Profession is invited to attend the Assembly. For information write Dr. B. T. Beasley, Secretary-Manager, Atlanta 3, Ga.

J. C. LEARY JOINS SCIENCE RESEARCH FIRM

James C. Leary, science editor of the Chicago Daily News, has resigned to become Research Associate with Lawrence S. Salter & Associates, Consultants for Science, Chicago and New York. Mr. Leary, known by many Illinois physicians, will make his headquarters at the home office of the organization in Chicago.

As research associate, Mr. Leary will work on several of the scientific research projects being carried out for various clients of Lawrence C. Salter & Associates.

Mr. Leary joined the Chicago Daily News in 1935. He is president-elect of the National Association of Science Writers, a member of the Committee on Information of the Division of Medical Sciences of the National Research Council; a consultant to the Surgeon-General of the Army, Maj. Gen. Norman T. Kirk, and a member of Sigma Delta Chi, the national professional journalistic fraternity, and of the National Press Club, Washington, D. C. For a while early this year he served as a war correspondent on various South Pacific battle fronts and areas.

Medical Economics

The Medical Economics Committee — Chauncey C. Maher, Chmn., 6 North Michigan Avenue, Chicago, Edwin S. Hamilton, V. Thomas Austin, Emmet B. Bay, Jay McDonald Milligan, Jacob M. Mora, George Halperin, Marie Wessels, Thomas C. Browning, Roland R. Cross, Milton E. Bitter, Edwin F. Hirsch, Ford Hick, Lt. Col. MC, William J. Bryan, John R. Vonachen.

"INDIANA PLAN"

MARIE WESSELS, M.D.
CHICAGO

The proposal of bills in Washington which deal with medical problems has stimulated a more aggressive interest in medical legislation among organized medical societies. The Indiana State, and some Indiana county medical societies have formulated plans to examine, criticize, and discourage the enactment of these bills. There may be other aspects to the Indiana Plan but from the literature and pamphlets available, and examined, the principal objectives seem to be to educate, not only the lay public regarding the attitudes of organized medicine but also to educate physicians so that they may be conversant with the details of the proposed bills and help create a country wide sentiment against such enactments.

To implement this educational program for physicians and various lay groups, literature is made available and a school for speakers is organized. The physicians who speak are selected for several reasons, some because of position in certain employer or employee groups, some because of personal qualities, abilities, influence or standing in local societies or organizations.

A positive part of the Indiana Plan is a program of education for lay and professional groups. In this there is an effort to show what services have been rendered by organized medicine for social and community welfare.

The literature points out that these services can and should be given, and organized, according to the local needs of smaller communities, — groups such as urban and rural, county and state rather than a national plan which may not fit the local need. In order to inquire into the needs and attiudes of local lay groups an intelligent list of questions is suggested. The speakers are to obtain an impression of reactions and attitudes to problems such as sickness insurance, and medical social and economic relationship as it is now being practiced.

The questions suggest the possibility of self critical analysis of present medical facilities. This line of thinking admits the possibility that present facilities could be more adequate and opens the door for reform from within. It is therefore probably the most constructive way of avoiding the tendency to have undesirable controls imposed from without.

A "Speaker's Kit" is furnished which contains reprints, pamphlets, and cartoons pertaining to details on a proposed bill. A speaker's kit on the Wagner-Murray-Dingell Bill is an example. It contains, among others, the following items: "The A.B.C.'s of Social Security;" "Anatomical Dissection of Paul de Kruif's Book, 'Kaiser Wakes the Doctor';" "Old Doc Politics is Back Again."

There is also included a copy of a letter by Congressman George E. Outland, dated November 29, 1943 in which he states, "Another point which I mentioned in connection with this whole matter has been the type of letter written to my office concerning this particular bill. I welcome communications on this and all other subjects, but I hope that such communications will be helpful and temperate, not simply emotional and intemperate. For example, when a doctor in California writes me (and I here quote verbatim) 'I am violently opposed to this bill; please vote accordingly', he scarcely is accom-

plishing his objeetive! Letters whieh are violently partisan in nature or whieh damn Roosevelt or which refer to any change in the status quo as 'Communism' show not only bad judgment but poor taste. On the other hand, some of the most thoughtful letters I have ever received in Congress have eome from physicians and nurses who have objectively and ealmly pointed out what they believe to be real dangers in the proposed bill. Such letters are doubly welcome, since they do shed additional light and not heat on a matter that is arousing such intense feeling."

Some of the pamphlets in the kit are well written but others should probably be rewritten with Congressman Outland's request for less emotionalism in mind.

There is no coneise seholarly article in favor of the Wagner-Murray-Dingle Bill showing why there is a need for such a bill and how it would solve some of the soeial and eeonomie medical problems. From a speaker's viewpoint such an addition would be helpful if he is to be eognizant and conversant with both sides of the question.

The medieal profession has little to fear from free, frank and open discussion of medical economies. The greatest danger is that the proponents of medical legislation often manage to appear as so many white knights riding out to save the nation. On the other hand, much of the rebuttal offered by those who follow the Indiana Plan would seem to be equally censurable, because it is presented with indignation. To indulge in rhetoric and recriminations is one of the tricks of the politician, and clearly beneath the dignity of the profession. To that extent Congressman Outland may be right. A simple, dispassionate array of the data is needed. It should be made available in sueh down-to-earth terms that Mr. and Mrs. Average Citizen can absorb them easily and continue to believe that, first of all, the same cool heads who attend to their health throughout the year are now ealmly considering the present proposal. Second that there is no unyielding resistance to change, if that change be best for the nation.

In these last decades modern medicine has, through its indefatigable labors, earned the eonfidenee of the public. It eherishes that as a sacred trust. Indeed, it regards the public interest and the interest of the profession, as one and indivisible. It therefore weleomes open discussion and disdains to deseend to platform anties.

Certainly medieine is not against change, for it truly welcomes change when physical science offers new, intelligent treatments and techniques. Politieal science, on the other hand, is admittedly backward. If new proposals will means progress in that field the profession cannot oppose them. All it will ever ask is coneentrated study of them, a genuine appraisal of their merits and demerits, and a final deeision that will not impair the possibilities of future progress for the sake of a hasty political triumph. It is in that way that the high standards of the medical profession can be maintained and broadened to meet the needs in the changing economic and social eonditions.

720 N. Mieh., Chicago 11, Ill.



Traditionally, or otherwise, it may be that health officials do not allocate sufficient time or devote sufficient energy to dealing in a practical way with the tuberculosis problem. In view of the comparative size of the problem, should we not change our point of emphasis and direct our attention more vigorously toward this disease, which, from the standpoint of health and social and economic security, assumes far greater significance than all the acute communicable diseases together? When a physician sees even a possible case of scarlet fever, he usually goes into action. Jointly with the health department, all recognized steps of prophylaxis are promptly introduced. Preventive medicine assumes a conspicuous place in his thinking. The same applies where other acute communicable diseases are suspected or diagnosed. Because of the acuteness of many of these diseases, perhap the circumstances become more dramatic. The presence of acute and serious illness engenders a greater desire for prompt and immediate action and assistance. On the other hand, the insidious character of tuberculosis is less conducive to the same mental reactions. But the channels of infection in tuberculosis may be multiplied many more times and are far more lasting than those of acute communicable diseases. Robert E. Plunkett, M.D., Conn. State Medical Jour., Jan. 1944.

State Department of Public Health

THE SEARCY-CLABAUGH LAW

By Richard F. Boyd, M.D., M.P.H.
Chief, Division of Local Health Administration
Illinois Department of Public Health

In the article, "The Development of Local Health Work in Illinois", which appeared in the preceding issue of this publication, mention was made of a survey in 1941 of the Illinois Department of Public Health by the American Public Health Association. As a result of this survey, a recommendation was made that efforts be directed toward obtaining a law enabling counties to establish and maintain health departments. A second recommendation proposed the organization of a State-wide public health committee to be composed of persons from all areas of Illinois having a genuine interest in public health. It was also suggested that the first activity of this committee be the promotion of a county health department law.

The Illinois State-wide Public Health Committee was organized in 1942, and had as its first Chairman, Dr. Frederick Woodward of Chicago. Mrs. Guy Tawney, of Urbana, was appointed Co-Chairman. This Committee obtained the active support and approval of many State-wide organizations including the Illinois State Medical Society, the Illinois Public Health Association, the Illinois Congress of Parents and Teachers, the Illinois State Dental Society, the Illinois League of Women Voters, and others.

The proposed law was drawn up with great care, following consultation with the Illinois Legislative Reference Bureau and leaders in the public health field throughout the United States. The bill was introduced in the Senate by Senator Earle Benjamin Searcy, and handled in the House by Representative Charles W. Clabaugh. During the time this proposed statue was under discussion in the General Assembly, it received considerable attention in the press and in several outstanding professional journals. An editorial appearing in the Journal of the American Medical Association, April 13, 1943, supporting this legislation, concluded with the following statement:

"Permissive or enabling legislation to provide for local health units and their support should be supported by the professional influence of the physicians of the State, unless existing laws are adequate.

"The career of public health as a specialty of medicine requiring graduate university training and practical experience is so far accepted as a part of the pattern of preventive medicine that the survival of the part-time general practitioner as a local administrator of a health department cannot be encouraged by the medical profession or be recommended to the taxpayer as the best his money can buy in public health."

After thorough discussion, the bill was passed by the General Assembly, without a dissenting vote, and was signed into law by Governor Dwight H. Green on July 9, 1943. It is generally known as the Searcy-Clabaugh Law.

This law provides that a full-time county health department may be established in either of two ways: by resolution of the county board or by popular referendum. In order to levy a special tax for the support of the health department, as provided in the law, a popular vote on the proposition is necessary. To place the proposition on the ballot, a petition, signed by at least five per cent of the voters in at least two-thirds of the townships or road districts

concerned, must be presented to the county board. The county board must then place the proposal on the ballot for consideration by the voters at the next general election. The statute provides that the maximum tax levy for the support of a county health department may be one mill on the dollar of assessed valuation, and this tax is to be in excess of the statutory limit.

This legislation also wisely provides that two to four counties may unite to establish a multiple county health department; a very desirable provision because some of the counties in Illinois are too sparsely populated to be able to support economically a full-time health department. The county health department, after its establishment, has jurisdiction in regard to public health matters throughout the county. This jurisdiction does not, however, extend within the borders of a local district health department organized under the Coleman Act or within the limits of a city which maintains a full-time city health department. Nor does the county health officer have jurisdiction within cities having populations greater than 500,000. This, of course, excludes only the City of Chicago.

Perhaps the most important provision of the Searcy-Clabaugh County Health Department Law is one making possible local autonomy for the health department. Such autonomy is assured by the provision that the county health department be managed by a county board of health, the members of which are appointed by the chairman of the county board, with the approval of the board. This county board of health replaces the township boards of health in counties organized under the township plan. The law specifies that the county board of health shall consist of seven members, at least two of whom shall be physicians and one a dentist, and all of whom "shall be chosen for their special fitness for membership on the board." Since these are all local persons, appointed by the chairman of the county board, this provides adequately for the "home rule" principle.

The legislation further provides that the county board of health shall have certain obligations, namely, that meetings shall be held at quarterly intervals, or more often if necessary; that offices and necessary equipment for the health department be provided, and that a report be published annually giving pertinent information relative to the financial condition of the health department and its activities during the year. The board of health is empowered to appoint the county health officer and, with his approval, to employ other members of that staff. It has been known for years that the success of a county health department depends largely on the training and experience of its employees. In order to insure that adequately-trained employees are appointed, the Act provides that all professional employees of the county health department meet minimum qualifications, as established by the Illinois Department of Public Health. It is also the duty of the county board of health to recommend to the county board of supervisors or the county commission, as the case may be, the adoption of rules and regulations necessary to the control of communicable diseases in the county. In order that the county board of supervisors or county commission might have this power, Section 25 of the Act to Revise the Law in Relation to Counties was amended, authorizing county boards in counties in which county health departments are established under the County Health Law, to pass and enforce county-wide ordinances relative to public health matters.

Subsequent to the enactment of the Searcy-Clabaugh Law, fourteen counties have organized health departments under its provisions. Eleven of these health departments were established by resolution of the respective county boards: Alexander, Edwards, Lawrence, Lee, Morgan, Peoria, Pulaski, St. Clair, Wabash and Will. The remaining four were established by popular vote: Adams and DuPage at the general election in November, 1944, and McLean and Montgomery at the judicial election in June, 1945. These latter two are now in the process of organization. The fact that the proposal carried by a very substantial majority in all of the counties which voted on the proposition indicates that our citizens are willing to tax themselves for the support of adequate local health services, knowing that such services pay dividends in the saving of human lives.

THE 1946 ANNUAL MEETING
CHICAGO
MAY 14, 15, 16

DIVISION OF PUBLIC HEALTH DENTISTRY ILLINOIS DEPARTMENT OF PUBLIC HEALTH

The Division of Public Health Dentistry had its origin as a section in the Division of Child Hygiene and Public Health Nursing in 1926.

Following World War I the dental profession of the State of Illinois felt the need of a dentist in the State Department of Public Health and in 1926 the Illinois State Dental Society and the Chicago Dental Society were successful in placing a dentist in the Department. There being no appropriation for such personnel, these two organizations paid the salary of a full-time dentist for one year. At the next session of the Legislature this position was included in the appropriation of the Department and the first Superintendent of Mouth Hygiene took office in September 1927.

On November 1, 1935 the Division of Dental Health Education, known as the Division of Public Health Dentistry since July 1, 1943, was established as a separate Division of the Illinois Department of Public Health by order of the Director, on recommendation of the Illinois State Dental Society through its Advisory Committee to the Department.

The program of the Division has been essentially educational, augmented since 1942 by remedial services for the underprivileged.

The educational phase of the program includes education of the parent, child, and the public at large, through the medium of the schools, civic and lay organizations, and the medical and dental professions.

This program accomplished much, for example: over a six-year period a report of 305,887 children reported by the Division showed 45.1% had received professional attention.

When funds from Social Security became available, it was possible to expand into remedial service for the underprivileged. This program is in effect in county health departments and districts where a health organization exists.

A very comprehensive and definite program has been developed for Industry. To more effectively conduct this program in cooperation with the medical-industrial program, a full-time dentist is assigned to the Division of Industrial Hygiene of the Department of Public Health.

In order that the Division would know the dental caries rates and conditions of the population, accurate records have been compiled on many thousands of Illinois children.

A special dental examination work sheet was developed in 1940 to be used by Selective Service. Forty thousand of these work sheets were returned to the Division and were coded and mechanically tabulated.

Special studies on endemic fluorosis were conducted in the State of Illinois in conjunction with the Division of Sanitary Engineering. The findings in these studies correlate very definitely with the U. S. Public Health Service studies.

During World War II the Division was active in organizing the dentists for Civilian Defense and participated in the Victory Corps Physical Fitness Program for high school boys and girls.

The Division of Public Health Dentistry is at the present time conducting balanced dental health programs in coordination with the general public health program.

Plans are being developed for postwar dentistry in public health to meet the requirements of the State at large.



We give our medical students innumerable facts from which they should infer that the periodic health examination is important. Yet, partly because we do not carry this education through to its behavior aspects as related to them, physicians themselves seldom have such examinations. They are more likely than most people to develop active tuberculosis, and have little advantage over others in recognizing an early case in themselves. Yet how few have periodic X-rays. Those who smile self-righteously at the physicians might reflect, however, that the failing is common elsewhere. Some time ago the Minnesota Supreme Court, in handing down an opinion, remarked that lawyers, although recognizing the dangers common when no will has been made, notoriously seldom have made wills themselves. Carl J. Potthoff, M.D., Amer. Jour. P. H., Oct., 1945.

Original Articles

PARA AND PERI-URETHRAL INFECTIONS OF THE FEMALE URETHRA

ERWIN H. ROESER, M.D.
AND
HERMAN L. KRETSCHMER, M.D.
President of The American Medical Association
CHICAGO

We wish to call attention to a group of lesions that are frequently overlooked as a cause of urinary symptoms in women. These lesions have been recognized for many years. Their presence is not recognized as frequently as it should be and their role in the causation of urinary symptoms is often overlooked. We refer to the presence of chronic infection in Skene's glands and in the peri-urethral glands.

Frequency of urination heads the list of symptoms for which most women consult the urologist. It was one of the outstanding symptoms in our group of cases which form the basis of this report. The statements frequently made by our patients were the following:

1. They have all had various forms of treatment in the hands of many physicians all without relief of symptoms.

2. In some cases various operative procedures were carried out which failed to relieve the patient of her symptoms.

3. Many stated that they had prolonged courses of local treatment, namely irrigations, instillations and sounds.

4. Some have had long courses of internal treatment with urinary antiseptics, sedatives, various sulpha drugs, vitamins and hormones.

5. Some had carried out a rather rigorous dietary regime.

From the Orson Wells Fund and the Presbyterian Hospital of Chicago.

Conscious of the fact that lesions of the kidney such as tuberculosis, pyelonephritis, and stone often manifest themselves with frequency of urination, the patient is subjected to a complete urological study, and the local lesion is overlooked. In several instances in our group the patients had been subjected to repeated cystoscopic examinations, intravenous and retrograde pyelograms, all with negative results. On the basis of this negative evidence, they were told they were "nervous" and discharged. The local causes of the symptoms were overlooked.

It is possible that a patient with a chronic infection locally may also have concurrent infection in the upper urinary tract. Therefore, care should be exercised so as not to ascribe the symptoms to the local condition alone and hence fail to observe the presence of an associated upper tract lesion. At the same time one must not always resort to costly examinations of the upper tract and overlook the local lesion, and, finally, it is possible, as occurred in some of our cases, to have both chronic infection in Skene's and the peri-urethral glands locally and a chronic infection in the kidneys.

We would like to direct attention to the possibility that chronic infection in Skene's glands or in the peri-urethral glands may be a factor in recurring attacks of pyelonephritis. A fact that is generally given little consideration.

Chronic urethritis as a cause of urinary symptoms will not be considered in this paper. Bugbee,[2] Folsom,[3] Stevens[4] and many others have repeatedly called attention to the role of chronic urethritis as a cause of frequency of urination in women. In a series of 1,000 cases of fre-

quency in women, Bugbee found urethral lesions present in 690 of them.

This paper is based on the records of 41 unselected cases of chronic infection in Skene's and in the peri-urethral glands. We wish to emphasize this group of lesions as a cause of urinary symptoms and to call attention to the fact that they are frequently overlooked in the cause and the treatment of urinary symptoms in women. Their presence is easily recognized and their treatment is both simple and curative.

Examination. — The local examination is carried out at the time of the first visit. If one bears in mind the possibility of their presence, one has no difficulty in making the correct diagnosis at once. It is very important to have good exposure and adequate illumination. The openings of Skene's glands are, when infected, seen at once.[1] Their openings are red, sometimes appear larger than normal, and often appear elevated. Pressure may show pus exuding from them.

The openings of the peri-urethral glands, when infected, are red and sometimes swollen. Aid in their localization can be obtained by a small wire meatal speculum, or one may use a pair of bent hairpins to retract the external urethral orifice. Most of the openings of the peri-urethral glands are located on the floor of the urethra in its anterior third. One may be aided in locating their openings by gentle stripping of the urethra. Pus expressed from the glands now appears at their openings on the floor of the urethra.

Because of infection in these glands, urethritis is often present. The presence of chronic urethritis justifies careful search for the presence of infection in the peri-urethral glands.

Examination for the presence of infection in the posterior urethra and glands necessitates the use of the endoscope.

Cystocopic examination is next in order to exclude the presence of a lesion in the bladder. At the same time a culture of the bladder urine is obtained. In some of the cases polyps may be seen at the internal urethral orifice. Their presence should at once direct our attention to the possibility of chronic infection in the urethra and peri-urethral glands.

At this point, one decides whether to proceed with ureteral catheterization and study of the upper tract, or to await the results of local treatment. Naturally if the examination shows the presence of pus and bacteria in the urine, we proceed with ureteral catheterization, plain film, intravenous pyelogram and bacteriologieal studies of the urines from each kidney.

Occasionally the patient is temporarily relieved by instrumentation with sounds or a cystoscope. This may be explained by the dilating effect of the passage of these instruments upon the infected glands which causes the expression of some of their retained discharge. The small ducts now become opened and drainage follows for a short time with temporary relief of symptoms.

Symptoms. — The female urethra pierces an erotic zone where a highly developed pattern of sensory nerves yields it particularly sensitive to pathological lesions. Even the minutest lesions may cause severe symptoms and great discomfort. The urinary symptoms presented by our patients at the time of the first examination are given in the following table. Many of these patients had more than one symptom. They were found to be present from 9 days to 12 years.

SYMPTOM	*NUMBER CASES*
Frequency	29
Burning	25
Nocturia	21
Urgency	18
Supra-pubic pain	10

These and other symptoms may be ascribed to the pathological processes found in either the urethra or the bladder. In an acute infection the mucous membrane of the urethra is swollen and inflamed and particularly sensitive. It now gives cause to the manifestation of both numerous and increased symptoms in the patient. This may be explained by the patient's response now to sub-threshold stimuli. The same may be said for the bladder in which a cystitis is observed. The fact that one patient with acutely infected urethral glands gave a history of frequency and urgency of every 30 minutes is easily understood.

Dysuria and a sensation of not completely emptying the bladder was not uncommon. A few cases were observed in which there was a constant dull pain in the region of the vagina and perineum. It is stated by some authors

that urethral pain may be referred to the thighs, flanks, lower abdomen and iliac regions.[5] There were 2 cases of excessive dribbling and attacks of incontinence. Dyspareunia was present in a few cases. There were 2 cases which had recurrent attacks of chills and fever due to a pyelitis.

Etiology. — In the study of this group of unselected cases no specific pre-disposing or etiological factor was observed. Age apparently was irrelevant. The youngest patient was 23 and the oldest was 68; 32 of the 41 cases occurred between the ages of 23-50; 30 of these patients studied were married and 11 were single. Pregnancy does not seem to play any important role. Of 19 married women, 8 had one or more pregnancies. Of 23 patients, 11 gave a history of previous pelvic operations. 2 of 16 patients questioned gave a history of previous gonorrheal infection. Infestation by the trichomonas vaginalis was found in 15 out of 20 cases examined for the possibility of its presence.

The association and role of chronic endocervicitis as a cause of urinary infection is to be remembered in each examination. It has been shown that when India ink was injected into cervical tissue, particles of carbon were subsequently recovered from the bladder and kidney.[6] Not infrequently, the vagina itself was redded and inflamed with a thick watery discharge that constantly bathed the external urethral meatus. One must consider the possibility of associated lesions of the cervix in a certain number of these patients.

On the first examination 19 out of 24 cases presented a urethral discharge. It must be mentioned here that a catheterized specimen of urine is often free of pus and sterile. Microorganisms obtained from the surface of the urethral mucosa might not represent the true infecting agents of the deeper structures, namely, the peri-urethral glands. Recurring attacks of the above mentioned symptoms are often due to the continued presence of infection in the deep recesses of the para and peri-urethral glands. The cause for the complete destruction is evident.

CASE 1. This case illustrates the presence of infection in the kidney, bladder, urethra and peri-urethral glands. Treatment of the latter alone prompted a complete cure.

Mrs. R. S., aged 38, entered the Presbyterian Hospital with the complaint of frequency of urination, nocturia and dysuria for one month. Physical examination was essentially negative. Intravenous pyelograms and blood chemistry were normal. Urine from the bladder and right kidney showed both pus and B. coli.

Examination of the urethra revealed an area of granulation tissue ¼ inch behind the external urethral orifice. To the right of the mid-line and on the floor of the urethra were two small reddened openings.

A diagnosis of infected peri-urethral glands, chronic cystitis, and chronic right pyelitis was made. The only treatment carried out was fulguration of the infected peri-urethral passages. This was followed by a prompt disappearnce of symptoms and the urine became both sterile and free of pus.

Treatment. — Once the diagnosis has been made the treatment is simple, easy and direct and consists of the destruction of the infected glands by means of the high frequency current. The fulguration electrode is introduced into the opening with gentle pressure and inserted into the bottom of the infected glands. In some cases this may be up to ½ or ¾ of an inch. The most distal glands are treated first. As a rule there is more than one infected gland that requires treatment. It has been our experience that most of the passages are found on the floor in the anterior 1/3 of the urethra from 4 to 8 o'clock. It is important to note that some openings may be obscured by inflammatory folds or swelling of the urethral mucosa, hence easily overlooked. Following the fulguration, the patient is advised to take a warm sitz bath 3 or 4 times a day.

The relief of symptoms is prompt. We advise these patients to return for a check up in 8 or 10 weeks to be sure all of the infected glands have been destroyed. We do not find it necessary to hospitalize these patients. Should the patient have an associated infection in the bladder, kidney, or elsewhere, treatment should be directed toward their immediate elimination.

BIBLIOGRAPHY

1. The Anatomy And Pathology Of Two Important Glands Of The Female Urethra. Am. J. Ob. 13:265-270, 1880. Alex. J. Skene.
2. Frequency Of Urination In Women. 1917. Henry G. Bugbee.
3. The Female Urethra. South. M. J. XXV, 1932. A. J. Folsom.
4. The Role Of The Urethra In Female Urology. Calif. and West. Med. 43:411, 1935. Wm. Stevens.

5. Referred Pain From The Female Urethra. J. U. 31:731, 1934. A. J. Folsom, J. C. Alexander.
6. Pelvic Infections In Urinary Disease. Brit. Jour. Urol. 5:249-267, 1933. A. Winsbury, H. P. White.

STERILITY

W. C. Scrivner, M.D.
E. ST. LOUIS

Probably, no group of patients attain more sympathy from their doctor than those unfortunate folks unable to have children. The sincerity of the childless wife in seeking aid impels us to help overcome her unwilling barren state. A person motivated by such high ideals of genuine maternal craving is refreshing in our office. Too often we are solicited to perform destructive procedures on patients not interested in family, state or nation.

The following remarks are based on my fifteen years experience in gynecology and presented with the desire to remind family physicians of the cardinal principles of investigation and correction in sterility. Our problem occurs approximately once in every ten marriages. We say sterile couples for the husband is accountable in about 30% of the cases. This fact often escapes the physician and many times a normal, fertile wife is unnecessarily subjected to tests, treatments and no small amount of humiliation.

At the first interview a medical history may point to an important constitutional deficiency, inflammation or factors with the residual sequellae of sterility. An initial complete physical is supplemented by a detailed pelvic examination. In doing the bimanual examination you will want to ascertain is it possible for penetration to occur? Are there any irritating discharges or secretions? Is the cervix stenotic? Is the uterus retrodisplaced? Is there evidence of other pelvic disorders?

There have been instances where in the simple sounding of a tight cervix served both diagnostic and therapeutic value in allowing free ingress of sperm hithertofore excluded from the inner channel of the upper generative organs thereby resulting in conception. Some of you have witnessed conception take place after cure of a cervicitis or vaginitis. Still others normal, except for uterine retrodisplacement, become pregnant if the patient rests on abdomen for 45 minutes after coitus. With some, the refraining from so called "cleansing douching" will permit pregnancy. To some it may seem unasthetic but experience has demonstrated several individuals thoughtlessly do so thereby decreasing the chance for fertilization.

Many patients have normal bimanual findings and we proceed to ascertain tubal patency by the Rubin insufflation test or one of its modification. Being certain to perform such tests shortly after a recent menstrual period to avoid dislodging a recently fertilized ovum. The referred shoulder strap area pain is so classical that the patient is bewildered by its occurence. Our reader will recall escaping gas from either open Fallopian tube ascends striking the diaphragm when the subject assumes an upright position after inflation. For patients found to have patent tubes this is the climax and new hope springs into the hearts of all parties concerned.

If the tubes are occluded we resort to hysterosalpingography for more detail. Recently your author employs 10cc. aqueous diodrast for contract study instead of lipiodol preparations, without the risk of disturbing complications of oil emboli in cases of troublesome intra-uterine canula introduction.

All cases are individualized from the start of your investigation and a hysterosalpingograph is interpreted in light of the patient's history and pelvic findings. The placing of her living child in the woman's arms and not the mere fact she became pregnant, possible even in the tube, or miscarried, is the only acceptable result considered satisfactory in sterility. The experience of informed investigators should sober clinicians to refrain from too enthusiastic proposal of surgery in cases of tubal closure.

Perhaps we have concluded the immediate case at hand is anatomically normal yet conception fails to ensue. The judicious administration of thyroid is often all that is necessary. In others Estrogen or Progestrone injections to create ova of optimum fertility and endometrium of healthy make up solve the problem.

Some couples seem normal but fail to have issue. Reconciled to their barren state they seek relief by adopting a baby. Soon conception takes place in the foster mother. Maybe the indirect

---

Given at the Post-graduate conference of the Hamilton-Jefferson County Society under the auspices of the Illinois State Medical Society at Mt. Vernon, Ill., on Thursday, June 7th, 1945.



Figure 1 — Shows hopeless closure at the isthmic position.



Figure 2 — Shows possible chance for pregnancy in hydrosalpinx but not probable.

influence of adoption produced rearrangement of the hormones necessary for pregnancy. Perhaps, the psychiatrist can explain?

The reader is reminded of the male factors with the idea that measures consist chiefly in improving general health, irradication of genital infections and endocrin therapy. Tact is imperative in dealing with this factor for male vanity often prompts the husband to avoid such examinations for fear of having lost his power of propagation.

In conclusion, I confess my failures and the heart breaking instances of sterile women delivered of abnormal infants such things as missing fingers, arms and harelips.

Every such occasions harken the adage that nature knows best and maybe she didn't want this particular patient to become a Mother.

To be sure the results are often disappointing in this field but then we, Doctors, are accustomed to little dividends and big disappointments and so we keep on striving with the hope in the next case or the next to attain our goal.

The proud exhibition of a normal child by its grateful mother is thanks sufficient for my part in any case of sterility.

CLINICAL EVALUATION OF SEROLOGIC TESTS FOR SYPHILIS IN EIGHT THOUSAND CASES

JOSEPH M. LUBITZ, M.D.
Surgeon (R), U.S. Public Health Service
U.S. Marine Hospital,
CHICAGO

Within the last five years, as a result of the war and health education, the blood of millions of people has been examined serologically for syphilis. Thousands of positive results have been uncovered, most of which were proven to be clinical cases of syphilis. In an annoying small percentage, positive blood tests were obtained in individuals in whom the clinical diagnosis of syphilis could not be established. In some, an appropriate cause for these so-called false positive reactions was found. In others, there was no obvious reason. As a result of these apparent shortcomings of serologic tests for syphilis, the tendency for the practicing physician is to be confused in his interpretation of the laboratory report. On the one hand, the inclination is still present to consider all positive results as syphilitic in origin, and on the other hand, to underestimate the importance of a positive test. This difficulty is still greater in the

---

Presented before Section on Pathology; 104th Annual Meeting Illinois State Medical Society, Chicago, May 16, 1944.

Services, where the military surgeon is alert for the early diagnosis of venereal disease, but is confronted with numerous new, heretofore unsuspected, causes of false positive reactions.

At the U. S. Marine Hospital, Chicago, Illinois, our patients include many old merchant seamen who manifest all types of late syphilis. In addition, we see young servicemen who were recently sero-negative, but on admission to the hospital present early syphilitic lesions, or on whom a positive blood test is discovered on routine examination. These conditions offered a good opportunity to attempt an evaluation of serologic tests for syphilis, correlating laboratory and clinical findings. Primarily, this study was attempted to determine under what conditions a positive blood test is associated with syphilis and when false positive reactions occur.

Method. — Eight thousand consecutive cases were examined. Blood was drawn from fasting patient on admission. The standard Kahn qualitative and the simplified Kolmer-Wassermann tests were performed throughout. Antigen for these tests was kindly supplied to us by the Venereal Disease Research Laboratory, U. S. Public Health Service, Stapleton, New York. Each positive test was repeated at least once. If a positive result was obtained, tests were repeated as often as necessary to establish a diagnosis. At times, this was impossible, due to early discharge from the hospital and transfer of station. When necessary, the Kahn quantitative test was supplemented. Occasionally, the Kahn verification test was applied. In many cases, particularly in servicemen, positive blood tests could easily be correlated with an obvious syphilitic infection. In others, the cause for false positive reactions was obvious, as for instance, in malaria, and following smallpox vaccinations. In older patients a comprehensive history often revealed a history of an old primary lesion or inadequate treatment for syphilis. In many of these individuals, investigation of the past records available, either at our hospital or some other Marine Hospital, often revealed a positive history which was denied on the last admission. Finally, when no cause was found for the positive test, a spinal tap and x-ray examination of the heart and aorta were indicated.

Percentage of Positive Cases: — Of the eight thousand cases tested, two hundred and twenty-six, or 2.9%, gave positive results with one or both tests on their admission examination.

Percentage of False Positive Reactions: — Of the positive results obtained, thirty-one were definitely proven to be false positive reactions. A case was so considered when the past history gave no clinical evidence of syphilis, when the patient had one of the known causes of such reactions, and on subsequent examinations became persistently sero-negative. The Kahn verification test, when performed, was interpreted only in conjunction with other findings. The types of false positive reactions were as follows:

Smallpox vaccination	5
Malaria	6
Common cold, virus pneumonia, and upper respiratory infection	10
Scarlet Fever	1
Leprosy	1
Balanitis	1
Diabetes	1
Jaundice	1
Infectious mononucleosis	1
Tuberculosis, bone	1
Tuberculosis, pulmonary	1
Cause undetermined — "General biologic reaction"	2
	31

CASE 1. — The following case illustrates a typical false positive reaction. C.C. was admitted with a diagnosis of tertian malaria.

Date	Kahn Test	Wassermann Test	Other Tests
8-16-43	1 plus	Negative	
8-17-43	4 plus	Doubtful	
8-24-43	4 plus	Negative	Verification Test — "General biologic reaction"
8-30-43	Plus-Minus	Negative	
9- 5-43	Negative	Negative	
9-20-43	Negative	Negative	

In other cases, the apparent cause of false pisitive reactions was not so obvious. Only prolonged and intensive study indicated that we were dealing with a non-syphilitic reaction. Such a case is illustrated:

CASE 2. — H. S., a twenty-two year old male, was admitted because a positive blood test was found on a routine premarital examination. When admitted to the hospital he indicated that he was recovering from an

SAVE MAY 14, 15, 16
FOR
THE ANNUAL MEETING

upper respiratory infection. The laboratory findings were as follows:

Date	Kahn Test	Wassermann Test	Other Tests
6- 1-43	4 Kahn Units	Negative	
6-10-43	80 Kahn Units	Doubtful	
6-15-43	160 Kahn Units	Negative	
6-23-43	4 Kahn Units	Negative	
6-28-43	Plus-Minus	Negative	
7- 6-43			Spinal Tap — Negative
7- 8-43	4 Kahn Units		Verification Test —"General biologic reaction." Smears and hetrophile antibody test negative for infectious mononucleosis
7-14-43	Plus-Minus	Negative	
8-12-43	Negative	Negative	
9- 1-43	Negative	Negative	

CASE 3. — In another instance, a twenty-one year old colored male patient was admitted with an atypical penile erosion. The blood tests were negative at first, but later became positive. Although a syphilitic infection would have been the likely cause, further studies indicated that this was a non-syphilitic reaction. Laboratory data was as follows:

Date	Kahn Test	Wassermann Test	Other Tests
12-11-43	Negative		
12-17-43	Plus-Minus	Negative	
12-24-43	3 Plus	Negative	
12-28-43	4 Kahn Units	Negative	
12-30-43			Dark field examination of lymph node and penile lesions, no treponema pallida found. Smears for Ducrey bacillus — negative
12-31-43	3 Plus	Negative	
1- 3-44	2 Plus	Negative	Dark Field examination, Negative
1-10-44	Negative	Negative	
1-20-44	Negative	Negative	Frei test and Ducrey skin test negative
1-28-44	Negative	Negative	
2-11-44	Negative	Negative	
4-11-44	Negative	Negative	

In addition to these thirty-one cases, a group of seven cases was found which were probable false positive reactions. These were largely in young individuals who could not be observed over the desired length of time. Several exhibited a fluctuation of titer, ranging from 0 to 3 plus with both tests. All investigations from a clinical standpoint, including spinal tap and x-ray of the heart and aorta, were negative. In most instances, previous serologic blood test within a recent time had been negative. In some, no history of any recent infection was obtained. Some of these patients probably belonged to the so-called "general biologic reactors."

In all, thirty-eight, or 0.4% of eight thousand cases gave false positive reactions. Although this is a small percentage of the total, it comprises 16.8% of the total positive reactions.

The following table is intended to demonstrate that in this group of cases the Kahn test tended to give more false positive reactions than the Kolmer-Wassermann test.

Positive to Kahn test only	26
Positive to Wassermann test only	8
Positive to both	4
	38

Syphilitic Reactions. — One hundred and eighty-eight cases were encountered which could not be considered as false positive reactions. These could be divided into two groups, (1) *true syphilitics,* who gave clinical evidence of syphilis, or who were already under treatment, or who gave a definite history indicative of a syphilitic lesion, and (2) *probable syphilitics* — cases with a positive serologic blood test but no clinical evidence of syphilis.

(1) One hundred and thirty-two were considered to be true syphilitics. Of these, sixty-six gave demonstrable, objective findings of syphilis. These were listed as follows:

Primary or secondary syphilis	27
Neurosyphilis	35
Cardiovascular syphilis	4
Combined forms	2
	66

In sixty-six, no lesions were found, but these were already under treatment, or gave a history of syphilis.

(2) In fifty-six cases, or 30%, in spite of positive serologic findings, intensive questioning and clinical examination, including in most cases x-ray examination of the heart and spinal tap, revealed no evidence of syphilis. Several such cases are illustrated:

Name	Age	Color	Kahn Test	Wassermann Test
Th.R.	62	White	Negative	3 plus
H.G.	52	White	Negative	4 plus
L.B.	46	Colored	2 Plus	4 plus
G.S.	46	Colored	4 Plus	4 plus
F.A.	40	White	3 Plus	Negative
W.D.	35	Colored	2 Plus	3 plus
T.S.	32	Colored	Negative	4 plus

It was found that the percentage of colored patients in this group was very high and that by

far the greater number of cases was in individuals over forty-five years of age. The titers were, as a whole, not as high as in proven syphilitics. These findings lead one to presume that these were actually latent syphilitic cases in which a process of "self-cure" had apparently occurred.

Value of Single Test Compared to Multiple Tests. — It has been stated that a single good serologic test is sufficient, and that more tests are only apt to confuse. An attempt was made to determine the validity of this assumption. Of the one hundred and thirty-two proven syphilitic cases, the following positive results were found:

Positive to Kahn test only	10
Positive to Wassermann test only	22
Positive to both	100
	132

If the Kahn test alone had been used, twenty-two cases, or 16.6% would have been missed. If we had used a complement fixation test only, ten cases, or 7.6% would have been missed.

Doubtful Reactions. — The tendency has been to report a plus-minus result as negative. Presumably, such reactions are often due to technical variations of sensitivity of a test and should be of no concern to the clinicians. Whereas, occasionally such may be the case, in many cases it indicates a positive finding. The following proven syphilitic cases exemplify such instances:

Name	Clinical Diagnosis	Kahn Test	Wassermann Test
W.J.	Insufficient treatment	Plus-Minus	4 Plus
W.W.	Syphilitic Aortitis	Plus-Minus	3 Plus
W.T.	Treated Case	Plus-Minus	3 Plus
L.B.	Hist. of chancre—no treatment	Plus-Minus	1 Plus
F.M.	Neurosyphilis—under treatment	Plus-Minus	Negative
M.N.	Treated Case	Plus-Minus	Negative
A.N.	Hist. of chancre with treatment	4 Plus	Plus-Minus
J.C.	Neurosyphilis	4 Plus	Plus-Minus
R.	Neuro and cardiovascular syphilis	Negative	Plus-Minus
A.T.	Treated Case	Negative	Plus-Minus

These sample cases indicate that if a plus-minus result were called negative, particularly if no other test was used and the clinical diagnosis was in doubt, the clinician would be deprived of a valuable clue in his diagnosis. Kolmer[1] is of a similar opinion.

Sero-Negative Cases. — Of the entire group of negative results, six were found which were syphilitic. Five of these were dark field positive and sero-negative, and one had neurosyphilis.

Discussion. — The relatively low incidence of positive reactions in a general hospital, where the rate of venereal disease cases is rather high, is due to the fact that this includes only admission specimens. Repetitions of blood tests from syphilitic patients often inflate the ratio of positive tests obtained.

The percentage of false positive reactions slightly exceeds the expected ratio of 0.1% to 0.4%[2]. Nevertheless, considering this is 16.8% of the total number of positive results, it indicates that one out of six positive reactions is non-syphilitic. In addition to the smallpox vaccination, malaria, etc., we have learned that upper respiratory infections, including the so-called virus pneumonias, are significant causes of such reactions. It can be stated that almost any recent organic disease may be the cause. In a few cases, absolutely no cause for the false positive reaction could be determined. These are the so-called "general biologic reactions," by exclusion. Whereas low titers are often found in these reactions, a titer of several hundred units may also be found in certain febrile conditions.

Of some significance is the fact that in our group of cases, the Kahn test gave a higher incidence of false positive reactions than the Kolmer-Wassermann test. However, strongly positive reactions were also found with the latter test. In reactions following smallpox immunization, it had been previously found that the incidence of false positive reactions with the Kahn test was higher than with the Kolmer-Wassermann test[3]. Rein[4], studying a large group of false positive reactions encountered in the U. S. Army, also found that the flocculation test tended to give a higher incidence of false positive reactions following smallpox vaccinations, upper respiratory infections, and virus pneumonias than did the Kolmer- complement fixation test. Furthermore, he indicates that each particular disease seems to have its own selectivity for serologic tests with which it gives false positive reactions. The impression gained from the present studies seems to indicate that there is a tendency for the flocculation test to give a higher incidence of false positive reactions than the complement fixation test.

It is, therefore, inadvisable to institute antisyphilitic therapy, particularly in young patients, unless clinical evidence of syphilis is

manifested. Otherwise, the patient should be observed for at least three months with particular interest in the decrease or fluctuation of titer. In most instances, a false positive reaction will become negative within this period of time. We have also seen instances of serologic relapses following smallpox vaccinations in old syphilitic patients, where the test remained positive over a period of at least a year. As a further word of caution, it should be remembered that merely because a patient has other cause for a false positive reaction, there is no reason why he could not also have syphilis.

In the group of syphilitic patients, the incidence of neuro-syphilis, symptomatic and asymptomatic, seems high, comprising half of all of our cases. Earlier reports of central nervous system involvement gave much lower figures. Thus Bruusgaard[5], in 1929, found only 9.5% of neurosyphilis in untreated cases. In a recent edition of his book, Moore[6] stated that 25% of syphilities of all types develop some form of neurosyphilis. The routine use of spinal fluid examinations, using a good sensitive test, will reveal a high incidence of positive spinal fluid results. The Kolmer-Wassermann test, applied to spinal fluid, was found to be very satisfactory in our laboratory.

It can be considered that the group of cases with positive blood tests and negative clinical findings were actually latent syphilitic cases. These men gave no history of treatment and apparently had no ill effects of the disease. This indicates that about one-third of all cases of syphilis will undergo "self cure." Turner[7] also found in ten thousand cases with positive blood tests examined, that one-third of all males, and one-half of all females had no physical evidence of infection. Black-Schafer and Rosahn[8] studying autopsy material, found that in spite of positive blood tests, only 44.2% manifested organic changes due to syphilis. Stokes and DesBrisay[9] found that of four hundred and thirteen cases of untreated or inadequately treated cases, 30% tended to become sero-negative. Bruusgaard[5] found that in untreated cases, about one-third became sero-negative and about 15% were latent syphilitics. In all, about two-thirds of all his patients who were untreated, were not seriously inconvenienced by the disease. In the evaluation of newer forms of treatment for syphilis, it must, therefore, be remembered that a large percentage of patients may overcome their infection without the benefit of specific treatment.

For the sake of expediency, many laboratories use a single flocculation test. From our findings it can be seen that a significant percentage of cases would have been missed using such a test. There is no way of predicting under what conditions one reliable test is more suitable than another. In the same stage of the disease, the Kahn test may be positive, the Wassermann negative, and vice versa. We did note that in treated or latent cases, the Kolmer test tended to be positive more often than the Kahn test.

Conflicting reports with multiple tests do add to confusion, for as Kahn[10] mentioned, each individual test may, in non-syphilitic patients, give varying results on different days. In our group of probable false positive reactions, both the Kahn and Wassermann tests fluctuated from negative to 3 or 4 plus on repeated tests. In spite of the advisability of using more than one test, it seems impractical to set up a battery of more than two tests for routine clinical laboratory work. The use of a good standard flocculation and a good standard complement fixation test still seems the most reliable and practical basic procedure.

The low incidence of sero-negative but clinically positive syphilitic cases is partially due to the limited number of cases studied, or may be conceivably due to missed cases. However, the increasing sensitivity of serologic tests has raised the number of sero-negative cases in this class from 50% to approximately 90% within the last few years.

CONCLUSION

1. Serologic and clinical findings were correlated in eight thousand hospital cases.
2. The incidence of positive reactions is 2.9%.
3. The incidence of false positive reactions is 0.4% of the total tests performed, and 16.8% of the total positives obtained.
4. About one-third of untreated cases manifest no clinical findings of syphilis.
5. A single standard test for syphilis may miss as high as 16% of syphilitic cases.
6. Doubtful positive serologic results may be significant and should not be reported as negative.
7. The incidence of sero-negative cases with

active late syphilis is decreasing, due to the increasing sensitivity of tests as now used.

8. When properly interpreted, the serologic tests for syphilis are of greater value today than they were fifteen years ago.

July 1944

BIBLIOGRAPHY

1. Kolmer, John A. Problem of Falsely Doubtful and Positive Reactions in the Serology of Syphilis, American Journal of Public Health, **34**: 510, May 1944.
2. Eagle, H. On the Specificity of Serologic Tests for Syphilis as Determined by 40,545 Tests in a College Student Population. American Journal of Syphilis, Gonorrhea, and Veneral Diseases, **25**: 7, 1941.
3. Lubitz, Joseph M. Serologic Reactions following Smallpox Vaccinations. American Journal of Clinical Pathology, **13**: 139, 1943.
4. Rein, Major Charles R., M.C. Personal Communication.
5. Bruusgaard, E. Uber das Schicksal der nicht spezifisch behandelten Leutiker. Arch. f. Dermat. u. Syph. **147**: 309, 1929.
6. Moore, J. E. The Modern Treatment of Syphilis, Charles C. Thomas, 1941.
7. Turner, T. B. The Race and Sex Distribution of the Lesions of Syphilis in Ten Thousand Cases. Bulletin Johns Hopkins Hospital **46**: 159, 1930.
8. Black-Schaffer, Bernard, and Rosahn, Paul D., The Relation Between Blood Serologic Tests and Anatomic Lesions at Autopsy. Am. Jour. of Syphilis, Gonorrhea, and Venereal Diseases, **28**: 27, 1944.
9. Stokes, J. H. and DesBrisay, H. A., Observations on the Course of 413 Cases of Untreated or Inadequately Treated Syphilis. Am. J. Syph. **8**: 558, 1924.
10. Kahn, R. L. Serology in Syphilis Control, Williams and Williams Co. 1942.

CLASSIFICATION OF STRABISMUS

ARTHUR J. STRICH, M.D.

CHICAGO

This is an attempt to classify strabismus on an etiological basis. Strabismus cases are classified into anatomical and innervational. By anatomical is meant strabismus in which a lesion in the motor apparatus of the eye could be demonstrated. Innervational came to denote a case in which no lesion of the motor apparatus can be proved, although there may be a lesion of the visual apparatus of the eyes or a disease of the central nervous system not involving the ocular motility centers or pathways.

A. Anatomical
   1. Orbital
   2. Muscular
   3. Peripheral neuron
   4. Nuclear
   5. Central neuron
   6. Cortical
   7. Corpus striatum

B. Innervational
   1. Refractional
      a. Accommodative
         (1) Increased demand (esotropia, Donders' type)
         (2) decreased demand (exotropia in extreme hyperopia, acquired myopia, myopic astigmatism, and presbyopia)
      b. Esotropia of congential myopia
   2. Poor vision
   3. Psychologic and psychiatric
   4. Pseudoparalytic
   5. Dissociated vertical divergence
   6. Synkinetic

Orbital squints are caused by difference in shape of the two orbits. Etiology: cellulitus. tumors, exophthalmus, trauma, Crouzon's disease, Hand-Schiller-Christian's disease. To Bielschowsky, inequality of the two orbits "which is a rule and not an exception just as facial asymmetry is a rule and not an exception" is the cause of heterophoria. This author defines heterophoria as an "abnormal position of rest" and considers orbital asymmetry as a starting point for his theory of etiology of heterophoria and squint.

Muscular strabismus can be caused by a congenital or acquired abnormality of the external ocular muscles. Etiology: congential malformations, Duane's syndrome, hereditary ophthalmoplegia exterior of Treacher Collins, myasthenia gravis, tumors, fibrosis after trauma or surgery, contractures. Just as the primary muscular strabismus is rare, the secondary is common and important. Muscle contractures in strabismus may develop in a period of weeks and are an indication for surgery. It can be said as a general rule that strabismus cases should not be operated until they become "muscle cases".

Peripheral neuron injuries of the III, IV, and VI nerves are caused by diphtheria, Gradenigo's syndrome, lues, tuberculosis, meningitis, alcohol lead poisonings, pressure by tumors and aneurysms.

Etiology of nuclear strabismus: congenital aplasia, hemorrhage, infections, diabetes, and poisoning. At the Children's Memorial Hospital, we have under observation a little boy with almost total nuclear aplasia. He is able to elevate his eyes and converge a few degrees only, and has no other ocular motility, but his eyes are

Read at the annual meeting of the Illinois State Medical Society, Chicago, May 16, 1944.

straight and he is perfectly happy using his neck muscles instead of his eye muscles and is a living proof that a human can get along without any eye muscles. Paralysis of convergence belongs to this group. A diagnostic hint: it should be diagnosed only when contraction of pupils proves an honest effort to converge. Paralysis of divergence (which some oculists believe having a center in the midline immediately behind the VI nucleus) would belong to this group.

Entering the domain of supranuclear stabismus, for convenience let's start from the cortex. There are two important cortical centers for binocular, conjugate movements. The frontal center is the voluntary center for eye and head motions horizontally to the contralateral side and for elevation and depression. The occipital center directs binocular motions in response to visual stimuli: the "following" center. From both centers, fibers go through the posterior longitudinal bundle to III, IV, and VI nerves. Lesions of these centers or pathways will produce disturbances of binocular motility where the visual axes may remain parallel or produce a total lot of comitancy. Etiology: encephalitis lethargica, multiple sclerosis, small hemorrhages, tumors, emboli, tetanus, coma, strychnine poisoning, anoxemia cerebri; in children, frequently pertussis, measles, birth injury. How do we recognize a supranuclear lesion? A classical example would be the patient who had a tumor pressing on the lamina quadrigemina through which pass the fibers for voluntary elevation. This patient was not able to raise his eyes, but showed a positive Bell's phenomenon — his eyeballs turned up on attempt to close the eyes. This proves that the lower neuron and eye muscles governing elevation were intact. Another example would be the patient who could not turn his eyes to the right on command, but could do so following an object moving to the right (Wernicke's pseudo-ophthalmoplegia, frontal center affected, occipital intact). Another classical example would be furnished by the patient who could not turn his eyes to the right by any means, but did so when his left ear was irrigated with cold water and a nystagmus developed. Aside from these rare cases of purely supranuclear paralysis, there are many often undiagnosed cases where a supranuclear paresis complicates another type of squint or exists per se. For instance, next to an esotropia, some patients will show a smooth and easy dextroversion, but the levoversion will be slower, more difficult, in a cogwheel fashion. Often will the patient tell that it is easier for him to look to the right than to the left. Supranuclear pareses are frequently seen in spastic children. In these cases the angle of deviation is particularly variable and increases as the child is examined. At the Children's Memorial Hospital, thanks to the alertness of the Neurological, Orthopedic, and other clinics, the Eye Department gets an unusual opportunity to observe many supranuclear pareses. By analogy with a spastic paralysis of the extremities which is caused by an upper motor neuron disease we frequently call supranuclear strabismus cases "spastic strabismus", and, indeed, often their eyes seem to show a small tremor on fixation — "spastic fixation". This might be due to a proprioceptive disturbance or to the fact that the upper neurons are more concerned with the control of a motion by releasing the proper amount of innervation than with the actual executing of the job. Since most of these cases do not seek ophthalmological advice, statistics showing the frequency of a supranuclear factor are difficult. It is important to recognize the presence of a supranuclear factor for the following reasons: 1-Explanation of why the patient with no refractive error, with no muscular paralysis, has a strabismus; 2-For prognosis: We are able to tell the parents of a spastic child, having also a supranuclear strabismus, that the eyes will improve as the general condition improves; 3-Contra-indication for muscle surgery in certain cases; 4-Indication for anti-spastic treatment: atropinization of both eyes, prolonged use of barbiturates or perhaps dilantin in certain cases, general medical care; 5-Indication for use of prisms in certain cases.

Corpus striatum strabismus can be diagnosed in the presence of other striatum lesions. The differential diagnosis has been presented by Bielschowsky. Etiology: postencephalitic parkinsonism, paralisis agitans. Wilson's disease. Huntington's chorea, pseudo-sclerosis. These cases are rare.

Innervational factors frequently complicate anatomical strabismus or appear as a cause per se. The most important and most frequent strabismus, the Donders' type heads this group. Just

as demand of excessive accommodation causes spasticity of the convergence center and, therefore, esotropia, decreased demand for accommodation, is blamed for exotropia. A patient with extreme degree of hyperopia or with myopic astigmatism does not benefit by accommodation and the latter falls into disuse. A patient with acquired myopia is emmetropic for the first years of his life, but as he becomes myopic, he needs to employ his accommodation less and less, and thus his convergence faculty falls into disuse too.

A sizable group of cases of convergent squint associated with congenital myopia has been recently reported by Gamble. According to Chavasse, congenital myopes are responsible for 1% of convergent squints. These cases start to squint early and the angle of strabismus shows great variability. I believe that they can best be explained as a conditioned reflex: since the child can see clearly only objects held close, when he has to converge he comes to associate these two conditions, namely, clear vision and convergence, long before the ciliary muscle is ready for business (6 months of age). This conditioned reflex is easy to break up and it is a fact that converging myopes readily improve under early use of concave lenses.

Poor vision squints depend on their direction on the age when the poor vision in one eye developed and on the refraction of the good eye. According to Chavasse, a child born with one blind eye will have exotropia because of non-development of convergence. An infant who develops a monocular or binocular visual obstacle will develop esotropia because of non-arrest of convergence after the "period of flux" — the early years when the child is full of vigor, tonus, and convergence. In the later years, the poor vision strabismus cases become exotropic because of disuse of convergence.

Pseudo-paralytic strabismus is an alternating convergent strabismus in children simulating a bilateral abducens palsy. These cases are obstinate because these children employ the turned-in contralateral eye to see objects on the temporal side and thus, do not use their external recti muscles. Atropinization, full correction, and especially occlusion will bring improvement and establish the diagnosis. Occlusion of one eye is here the best differential diagnostic test.

Dissociated vertical divergence, also called alternating hyperphoria, is caused by intermittent excitations of the vertical divergence centers. It may be bilateral or unilateral. The differential diagnosis between a paralytic vertical strabismus and dissociated vertical divergence can be made by placing a dark red glass successively before each eye. Since the embarrassed eye will go up, the red image will appear below, no matter whether the right or the left looks through the red glass; whereas, in a paralytic strabismus, the red image will be below for one eye and higher for the other. But even without a red glass or a dark wedge, as used by Bielschowsky, the diagnosis can be established by observation of the eye which, even if it shoots up most of the time, will occasionally sink below the horizontal. Another diagnostic point: the eyes will behave the same way in every diagnostic direction of gaze. The differential diagnosis between dissociated vertical divergence and a vertical muscle palsy is important because if we operate on the first one, we will merely transplant the range of the up and down motions higher or lower, depending on which muscle we operate; in other words, as soon as the patient recovers from the surgical trauma, his vertical strabismus will return. The treatment of dissociated vertical divergence is beyond the scope of this paper. It is possible that this condition should be classified as an anatomical strabismus, but so far no lesion has been demonstrated in the centers for vertical motion in these cases.

Overaction of the inferior obliques is believed to be synkinetic in origin. It may be unilateral or bilateral. This is a common condition found either per se or in connection with a convergent or divergent squint. It may be a cause of torticollis. This group does not include cases where overaction of the inferior obliques is secondary to trochlear or other palsy. Many oculists will ascribe every case of cyclophoria to a paralytic muscle. Bielschowsky found that most of his inferior oblique overaction cases had no muscle paralysis and believed that these cases are due to a weakness of the check ligament. The muscular contractures might appear in the later stages, but at first the overaction of the inferior obliques

is certainly a purely innervational condition. Due to the central location of the inferior oblique nucleus and its large size in comparison with other ocularmotor nuclei — according to Guibor — impulses from the overactive convergence center irradiate over to this nucleus and cause the inferior oblique to shoot the eye up and in. This upshoot can be diminished or abolished by full correction and frequently, by a prism base out or in as the case may be. The prism can be applied before the other eye, which is in the primary position, and thus, by reciprocal innervation, the eye with the overacting inferior oblique muscle can be brought down, which, according to Guibor, proves the innervational character of the deviation. It would be a mistake to operate such an overacting muscle as long as non-surgical treatment improves the case.

This classification is a rough outline for practical purposes and it is understood that most strabismus cases will present a combination of anatomical causes and innervational factors.

LITERATURE

1. A. Bielschowsky: Lectures on motor anomalies. Dartmouth University Publication.
2. Chavasse: Worth's Squint.
3. Gamble: Am. Journ. Ophthalm., February 1944.
4. Guibor: Personal communication.

BISMUTH SUBSALICYLATE IN OIL THE TREATMENT OF CHOICE IN VINCENT'S ANGINA

HARRY D. GROSSMAN M.D.
CHICAGO

Vincent's Angina or ulcero-membranous tonsillitis is an acute infectious disease involving the tonsils; untreated it may become subacute or chronic.

From the lesions present, the fusiform bacillus and the spirochete of Vincent can be demonstrated in abundance in smears stained with any of the ordinary laboratory stains but they show up best with carbol fuchsin. Whether these are separate organisms living in symbiosis or different forms of the same organism has not been definitely decided. Neither has it been proven that they are the responsible etiological factor.

The disease involves both sexes and is found more frequently in densely populated areas and where people live under crowded conditions. The suspected methods of spread are through improperly cleaned drinking dishes and through kissing.

The symptom most complained of is a sore throat usually unilateral although frequently it is bilateral. There is much pain in the throat aggravated by swallowing. The patient looks sick and tired despite the fact that the temperature is usually within normal limits; occasionally the temperature may get to 100 degrees Fahrenheit and very infrequently higher. In a full blown case, the tonsil is enlarged and red with a grayish exudate which is dirty at times; there is a deep ulcer present which seems to be eating away the tonsil.

In many cases the picture is present in both tonsils; on the other hand, there may be no exudate in early cases, only some redness; but the symptoms of pain and dysphagia are out of proportion to the temperature and findings. At other times, there may be a single patch of exudate or several such patches to resemble follicular tonsillitis. Cervical adenopathy is usually present and is unilateral or bilateral depending on the distribution of the tonsil pathology.

The diagnosis in the typical case is not difficult. The symptoms of severe sore throat with dysphagia and toxicity and a temperature within normal limits is the usual picture. The patient looks worried and the finding of a deep, irregular ulcer on one or both tonsils covered by grayish exudate is characteristic. In cases with no ulceration or exudate, the diagnosis is more difficult to make. Throat smears stained with carbol fuchsin take little time and will help to make the diagnosis in doubtful cases and confirm it in the typical ones.

In the differential diagnosis, several diseases must be considered. These are diphtheria, follicular tonsillitis, primary syphilis and agranulocytic angina. In all of these, the fusiform bacillus and the spirochete of Vincent are absent or if present, only in small numbers.

Diphtheria is the disease which may most easily be confused with Vincent's angina than any other. However here there is a history of exposure to diphtheria; the throat presents a grayish dirty membrane without ulceration which spreads to involve contiguous areas in all directions if allowed to proceed unchecked. Bleeding occurs if the membrane is pulled on to try to re-

move it. Smears are negative for Vincent's spirochete and the fusiform bacillus but may show the bipolar bacillus of diphtheria. Cultures on the other hand reveal the diphtheria bacillus in abundance. The temperature early in this disease is low as it is in Vincent's angina but if the disease is allowed to progress the temperature rises and in a few days may reach alarming heights. Toxicity becomes alarming if the disease is not controlled.

Follicular tonsillitis comes on suddenly with sore throat redness and swelling of the tonsils with round patches of exudate and usually fever that may carry the temperature to 104 degrees or more.

Chancre of the tonsil may look like a Vincent's ulceration except that the exudate is not pronounced and a smear with ordinary stains will not reveal the organisms of Vincent's angina nor of syphilis. The dark field examination should reveal the spirocheta pallidum. The ulcer is usually not as irregular and ragged and has a more punched out appearance. On palpation, there is a definite hardness to the lesion. If the lesion is of long enough standing there will be generalized adenopathy and other signs of secondary syphilis such as syphiloderm and condylomata. Early when the chancre is the only evidence of syphilis, there is a large submental gland on the same side as the chancre and this gland, unlike that in the other diseases under discussion, is usually painless and firm. The complement fixation test is positive except in the very early stages.

In agranulocytic angina, there is a severe sore throat that comes on abruptly; there is marked redness of the pharynx and tonsils with a patchy exudate, fever to 103 degrees or more and marked toxicity. The organisms of Vincent's angina are absent or present in small numbers; the diagnosis is made on the blood picture of a very low white count from a few hundred to two or three thousand with a typical differential count in which the polmorpho-nuclear leucocytes are markedly diminished or absent. This disease usually runs a rapidly fatal course.

In the treatment of Vincent's angina many drugs have been used. Each type of medication must have given some good results to its users. Because the spirochete is an anaerobe, drugs releasing oxygen have been advocated and hydrogen peroxide or perborate of sodium gargles or applications have been the most popular used. However the treatment is long and uncertain with these preparations. Others have applied saivarsan solutions topically and neosalvarsan solutions intravenously in 0.15 to 0.30 gram doses. Topically, the treatment is as uncertain as with the peroxides and also as tedious. However the intravenous method is a very good one and usually one or two treatments suffice. However the susceptibility of non-luetic patients to this drug is very high and its use a bit dangerous. Penicillin has been recommended recently and repeated injections of 20,000 units up to a total of 200,000 units over a period of several days has been used with success. Ipecac in varying solutions has also been used topically and in gargles.

Bismuth injections also have been used advantageously, given intra-muscularly. Under its proper use, the lesions in the throat practically melt away; usually within 24 hours of the first injection, the throat feels better and so does the patient. The lesion may already have started to subside or it may appear the same but in another 12 to 24 hours, it is resolving and usually a second injection given in 48 to 72 hours is all that is needed to effect a cure although occassionally a third injection in a similar interval is necessary to finish the treatment.

Given deeply into the buttocks in the upper outer quadrant using a 2 inch 20 gauge needle being driven in to the hilt, the drug best tolerated is bismuth subsalicylate in oil; given this and without any bismuth being present on the needle to be tracked into needle pathway, the treatment is practically painless. With a shorter needle there may be considerable discomfort from the injections. The first dose is 1.5 c.c.: each cubic centimeter of the preparation contains 2 grains of the drug thus making the first dose 3 grains of the subsalicylate of Bismuth; the second and subsequent doses are 2 c.c. each or 4 grains of the active drug. The treatments are given in alternate buttocks. It is essential to draw back on the plunger of the syringe to see if blood rises in the syringe; if blood is present, the needle is pulled back slightly until a bloodless area is found and then the drug is injected. It is rare to run into blood with this procedure but

it is wise to be cautious inasmuch as injection of this oily substance into the blood stream is dangerous.

Of 150 cases treated with this preparation 10 percent required 3 injections before the lesions disappeared completely; the others all had two injections. Although some appeared as though one injection would suffice, a second was always given to prevent the possibility of relapse. Other medications are not necessary although hot water gargles for the soothing effect of the heat and salicylates to alleviate the pain in the throat until the bismuth starts to show its effects, may be given. Eight of the patients, 5 1/3 percent, ran temperatures between 99 and 100 degrees Fahrenheit and 3.2 percent, ran temperatures to 102. One patient's temperature reached 101 degrees the day after the first injection but this subsided within 24 hours when another injection was given.

CONCLUSION

Because of the ease of treatment and the regularly excellent results, the treatment of choice in Vincent's angina is Bismuth subsalicylate in oil given intra-muscularly as outlined above.

Dudgeon, L. S., Vincent's Disease — Journal Of Laryngology and Otology. Vol. 47. P. 188, Mar., 1932.

Sanarelli, G., Origine Commune des Spirochaetes et des Bacillus Fusiforme. Compt. Rend. Soc. de Biologie. Vol. 96. P. 1136, 1927.

Lichtenberg, H. H., Werner, M. and Lueck, E. V., The pathogenicity of the Fusiform bacillus and the Spirillum of Plaut Vincent. J.A.M.A. Vol. 100. P. 707. March 11, 1933.

Smith, D. T., Should Fuso-spirochetal infections be treated with Arsenicals? Archives of Otol. Vol. 18, Page 760. Dec., 1933.

Fantus, B., Therapy of Spirochaetosis, J.A.M.A. Vol. 107. Page 741. March, 1935.

Maxwell, C. H. Jr., Treatment of Vincent's Angina with Acetarsone. New York Medical Journal. Vol. 36. Page 874. Jan. 1, 1936.

Ross, T. W., Vincent's Angina and Tartar Emetic. Northwest Medical Journal. Vol. 37. P. 49. Feb., 1938.

Editorial, Dangers of Sodium Perborate in the Mouth. J.A.M.A. Vol. 110. P. 445. Feb. 5, 1932.

Field, H. Jr., The Therapy of Fuso-spirochaetosis. J.A.M.A. Vol. 114 P. 1073. Mar. 23, 1940.

Shirazy, E., Fuso-spirochaetosis. International Clinics. Vol. 2. P. 115. June, 1940.

Tuberculosis is intimately linked with nutrition, both because the disease is common under famine conditions, and because an individual's lowered resistance is connected with appetite disorders, and wrong dietetic habits. One-third of tuberculosis people cannot obtain a proper diet on account of inadequate income. Better nutrition for all will enable the community to shoulder the burden of its tuberculosis, and gradually diminish the weight of that load.—NAPT Bull., England, June 1945.

HEMOCHROMATOSIS

Clinical, Chemical and Pathological Study of a Case

HAMILTON R. FISHBACK, M.D.

AND

FRANK H. FOWLER, M.D.

CHICAGO

Hemochromatosis in former years was diagnosed either at a very late stage, or more often by the pathologist at autopsy. However if one is alert to the possible significance of skin pigmentation with diabetes the chances of clinical detection of the disease are much improved. This is reflected in the report from the Mayo Clinic[1] of thirty cases of hemochromatosis diagnosed clinically. More recently a skin test was reported which may be used clinically in confirming the diagnosis in suspected cases.[2]

Case RTB, a white male of 52 years, height 69 inches, weight 130 pounds, complained of weakness, blurred vision, urinary frequency with nocturia, marked thirst and drinking of large amounts of fluids, and enlargement of the abdomen.

Family history and previous illnesses were not significant. He was a carpenter for many years, and a glass grinder and polisher for 8 years. He denied venereal disease. He had drunk illicit liquor quite heavily for several years in the prohibition period, and somewhat less heartily since 1934.

History of Symptoms: Brown pigmentation of the skin had lasted for 10 years. Onset was noted during a period of work with exposure to extremely hot sunshine. The brown color did not fade afterward as usual with sun tan. Recently it deepened somewhat. Upper abdominal enlargement appeared about 2 years back, was constant, and increased slowly to moderate size.

Weakness was in evidence for 2 years, at first just a "loss of pep", with later inability to climb stairs or do any physical work. Sexual urge was absent as well as sexual ability. Sleepiness was present almost constantly.

Frequent urination had been marked for about 9 months and possibly had been present in a lesser degree before that time. For several weeks urine had been passed hourly or oftener in the daytime and three to four times at night.

Water intake was markedly increased for about the same period of 9 months. Despite large quantities of water drunk, the mouth was always dry.

Blurring of vision began about 5 months before and was the main complaint.

Swelling of the feet and lower legs was present for two weeks. It was increased by being up all day.

For two years cramps in the legs and feet occurred

From the Department of Pathology, Northwestern University Medical School, and the Norwegian American Hospital, Chicago, Illinois.

frequently and were more severe at night.

Significant physical findings, abstracted from the general physical examination: The skin was a peculiar grayish blue tint in a deep bronze color over the face, neck, hands, forearms, feet and lower legs. The penis and scrotum were dark brown. Elsewhere the skin was tan-brown. There was also yellow-brown discoloration of the mucosa of the gums and roof of the mouth. The teeth were partly carious and poorly kept.

The skin was thin, inelastic, dry and without oil. The patient stated that he did not sweat. The gray scalp hair was thin, dry and brittle. No hair was present on the chest or extremities or in the axillae, and it was sparse in the pubic region.

The abdomen was distended in the upper half and rounded. A few distended superficial veins were present over the upper abdomen and lower chest anteriorly. The liver extended from the 4th rib, anteriorly on the right, down to the umbilicus. Its surface appeared smooth.

There was slight pitting edema of both feet, with small scattered telangiectases on the dorsum of the feet and the ankles.

The musculature was well developed, but somewhat flabby and weak.

Course. From June 28 the patient was brought under diabetic management with some difficulty. Daily dosage up to 125 units of insulin did not free the urine of sugar with a balanced food intake of 1500 calories. Ascites appeared but progressed quite slowly. He developed pain and tenderness near the anus on July 18 and on July 25 was taken to the hospital for drainage of an ischiorectal abscess. The opening healed after a few days of pus drainage. He continued at work until August 1 when, with an acute onset of vomiting, ileus, and fever, he was taken to the hospital, remaining there six weeks for treatment and dietary management. Insulin requirement was gradually adjusted down to 60 units daily. His later course at home, not able to work, was somewhat irregularly downward, with gastric upsets apparently aggravated by increasing ascites. On August 26, while in the hospital, 3150 cc of thin, clear, ascitic fluid was removed. On January 3, 11,000 cc was removed and on January 20, 6,500 cc more.

On January 22 his abdomen became greatly distended and tympanitic, with vomiting and fever. The next day he was taken to the hospital in coma, with a temperature of 104.4°, and lived only a few hours.

Laboratory tests. (Summary of significant findings)

Urinalysis (Findings varied with the state of diabetic control)

Sugar — much to none
Acetone — ++++ to none
W.b.c., casts, albumin — slight to none
Hemosiderin granules — Present in several specimens examined

Blood counts

R.b.c. — varied from 4.68 to 3.54 million. No abnormal forms.
Hgb. — 95 to 80 Sahli units
W.b.c. — 16,700 to 5,500
Differential — Little variation from average, except for an increase of polymorphonuclears with the higher counts

Blood Chemistry

Sugar — 322.5 to 67 mg.% in several examinations
Alkaline Reserve — 42.8 with blood sugar 238
Cholesterol — 109.9 (Repeated)
Non-protein nitrogen — 30 mg. %
Urea — 14.8 mg. %
Uric acid — 2.9 mg. %
Chlorides — 430 mg. %
Blood bilirubin (Van den Bergh) Indirect test. 0.2% total. Icterus index

Red Blood Cell Fragility — 0.42% to 0.32% saline. Normal range.

Wassermann and *Kahn Tests.* Repeated negatives

Gastric Contents — total acid 68, free acid 60. Blood present during gastric distention and continuous drainage.

Feces — Normally formed stools. Blood positive only at periods indicated above.

Liver Function — Bromsulphalein
5 min. period — 60% of dye in blood
30 min. period — No dye in blood

Ascitic Fluid (3 specimens)

Specific gravity 1010-1011. Bile negative. Albumin 2%
Hemosiderin granules — many

Basal Metabolism — plus 12.6

Skin — Intradermal injection test — strongly positive for iron. Biopsy specimen — showed iron in characteristic locations.

Autopsy — The following findings were evident in addition to the pronounced skin pigmentation and other physical details previously given. They are taken from the complete autopsy protocol.

The skin test[2] was brilliant in the darker pigmented patches, but was also distinct in any selected area of the body. Slight icterus was shown by the sclera.

The liver weighed 3320 grams. Its capsule was irregularly scarred and retracted. It was hard and woody and on section was a deep, dull rust color. Much diffuse fibrous tissue was present. The pancreas likewise was hard, and fibrous on section and also a dull rust color. The cut tissue gave a positive chemical test for iron. Similar pigmentation of iron deposits was found in the lymph glands, especially marked in the mesenteric glands. Also it was in patches in the intestinal mucosa and diffusely in the thyroid, pituitary and testicles.

There was huge distention of the stomach with air and thin fluid containing considerable dark red blood with some clots. Blood was also found in the intestines. Only superficial erosions of the gastric mucosa were found.

The peritoneal cavity contained 3000 cc of milky, opaque, thin fluid, and its lining was white and opaque. There was slight white turbidity of the fluid and membranes of the brain.

Microscopic sections showed marked deposit of iron pigment with cirrhosis of the liver and pancreas.

The testicles showed much pigment and atrophy of the tublar epithelium. In the other structures of the body the iron pigment was associated with little evidence of change. There was a very early acute meningitis, apparently a terminal condition. The bacteria were of numerous forms, resembling the mixture usually found in the intestine, so the meningitis was interpreted as secondary to the ileus with blood stream invasion.

Various tissues taken at the time of autopsy were examined quantitatively for iron with results as given in Table 1. These were leached in distilled water when fresh and dried and ground to a fine powder and iron was determined by Hanzal's method[3]. Iron was calculated on the basis of fresh tissue weight.

Table 1

	Wt. of organ	% Fe	Total in organ gms.
Liver	3320	0.528	17.530
Spleen	290	1.37	3.973
Kidneys	350	0.39	1.265
Heart	500	0.318	1.590
Lungs	1045	0.255	2.665
Pancreas	145	0.467	0.677
Lymph Node (abdominal)		0.727	
Muscle* (striated)	14000	0.18	25.200
*Total mass calculated as 25% of body weight.			
Total			52.9

Since the spleen cannot be freed of its blood by the method used, results are not considered pertinent as regards newly stored iron. Furthermore, the spleen, in hemochromatosis, is not considered to have a significant increase of its stored iron.

No exact studies on the variations of skeletal muscle mass in the human have been found. Macalister believed that it makes up about 40% of the body weight in man[4]. Rather near the end of his life, without ascites, this man weighed 124 pounds. In estimation of iron in the muscle system 25% of the body weight, or 14 kg., was taken as a gross approximation of the skeletal muscle mass. This is believed to be low.

The normal amount of iron in the body, including iron in the blood, totals about 3 gms. The total found here in the examined tissues, including that based on a calculated weight of the striated muscle, is 52.9 gms. Obviously the blood iron is not included, as well as that of certain other considerable storehouses, such as the skin, bone marrow and lymphoid structures.

SUMMARY

A man of 52, with a history of heavy drinking of alcoholics, presented findings of pigmentation of the skin of ten years' duration, enlargement of the abdomen for two years, with heavy intake of food and water, frequent urination for nine months, and marked glycosuria.

Tests for iron in the skin made clinically by the method of Fishbaek showed diffuse cutaneous iron deposits.

Death occurred seven months after diagnosis, and autopsy showed iron pigment deposited widely in the body. By quantitative examination of various tissues approximately 52.9 gms. of iron could be accounted for. Considerable iron in other tissues could not be determined accurately because of the variability of deposits.

BIBLIOGRAPHY

1. Hemochromatosis: Report of Thirty Cases in which the Diagnosis was made during Life. H. R. Butt and R. M. Wilder, Arch. Path. 26:262, 1938.
2. Clinical Demonstration of Iron in the Skin in Hemochromatosis. H. R. Fishback. J. Lab. and Clin. Med. 25:98, 1939.
3. Determination of Iron in Biological Material. R. F. Hanzal. Proc. Exp. Biol. and Med. 30:846, 1933.
4. Man Physiologically Considered. Alex. Macalister. Present Day Tracts. Second Series. No. 39, p. 21, 1891.

Most of the permanent value of a tuberculosis survey program depends on a thorough follow-up of definite and suspicious cases in regular diagnostic clinics where the history, physical, laboratory and X-ray findings permit accurate evaluation of the status of the patient's disease.—Rep't Cattaraugus Co. (N.Y.) Health Dept.

Due to improved methods of case-finding and more widespread knowledge about the disease, tuberculosis did not increase in this country during the war, though it rose to alarming proportions in Europe and Asia. Nevertheless, it is deplorable that tuberculosis took more than 205,000 American lives during the war years. Harry S. Truman.

Physical Medicine Abstracts

John S. Coulter, M.D.

PHYSICAL THERAPY IN RHEUMATOID ARTHRITIS

B. I. Comroe, M.D., Philadelphia

In ARCHIVES OF PHYSICAL MEDICINE,
26;11;682
November, 1945

Hydrotherapy is valuable in the treatment of the arthritic patient, but it is contraindicated in acute rheumatoid arthritis because of the probability of fatigue and exacerbation.

For patients with rheumatoid arthritis of multiple joints, one may employ hot baths at a temperature of 100 to 102 F. for five to twenty minutes with the patient moving all of his affected joints while submerged in the bath.

The hot bath is useful in subacute or chronic generalized rheumatoid arthritis, although some arthritic patients, particularly those who are emaciated and weakened, do not tolerate exposure to heat and are easily exhausted from prolonged hot baths.

Fluids must be given freely after the bath (or during the bath if marked sweating occurs). If there is excessive perspiration, 2 to 6 tablets of sodium chloride (1 Gm. each) may be given. All patients should rest in bed for at least an hour after the bath.

Whirlpool baths are useful in treating chronic rheumatoid conditions of the upper or lower extremities.

Hot foot or arm baths may be given by using a large bucket or specially constructed container. The water should be 100 F. at first, the temperature being gradually raised to 105, 110, or 115 F. if this heat is tolerated. The affected part should be kept in the bath for twenty to forty minutes.

In subacute or chronic cases, if it is impossible to move the patient to a tub, a hot full wet pack may be of value.

Hot paraffin applications are an effective method of applying heat to individual joints. If the hands are involved, eight to ten layers of paraffin may be applied and allowed to remain in place for thirty to sixty minutes with the part wrapped in a warm towel or blanket. The paraffin is then peeled off and replaced in the inner container of the double boiler to be used at the next application.

Systematically performed baking combined with massage may work wonders in the treatment of painful knees, shoulders and other joints. Unfortunately, too many persons look on this as an office or hospital procedure, although an effective baker may be built cheaply for the home.

Simple inexpensive heat lamps have been devised for local application of dry heat.

General heliotherapy may be a tonic value in chronic cases.

Infra-red rays are also useful in providing temporary relief of swollen joints.

Diathermy is the most efficient method of heating deeper tissues and is particularly valuable in treating the spine and large joints. It may be indicated for contusions, muscular strains, sprains, tenosynovitis, chronic forms of arthritis, myositis and fibrositis. In some cases of acute bursitis, pain is relieved by short wave

diathermy, while in others, exacerbation results (and diathermy must be discontinued).

Most authorities concede that the effects produced by diathermy are due solely to the generation of heat and not to any specific biologic or bactericidal action. Diathermy is contraindicated in most cases in which there are acutely inflamed joints. The average effective duration of a diathermy treatment in chronic cases is approximately twenty to thirty minutes.

ULTRAVIOLET RADIATION IN THE TREATMENT OF INDOLENT, SOFT-TISSUE ULCERATIONS

Irwin Stein, Capt., M.C., and Mary M. Shorey, 1st Lt., P.T.

In THE PHYSIOTHERAPY REVIEW, 25;6;273 November-December, 1945

For the past ten years we have employed ultra-violet radiation in the treatment of soft tissue ulcerations and have found it to provide the stimulus for healing in instances where other methods have failed. Strict adherence to technic is essential for optimum results.

Strict aseptic technic is of prime importance in handling the wound or defect. It makes little difference whether the dressings are removed in the ward or in the physical therapy department, so long as strict attention is paid to the following details. After bandages and dressings are taken off, any layers of ointment, sulfonamide or antiseptic jellies are removed with sterile swabs. The entire region is then irrigated with warm normal saline to remove any remaining debris. Even thin films of ointment interfere with the action of ultraviolet, which emphasizes the need for all these precautions. Excess fluids are blotted up with sterile cotton applicators and sterile towels are draped so as to exclude all but the wound itself. At this institution we have employed an air-cooled mercury quartz lamp of the Kromayer type for radiation of the wound, as well as the conventional air-cooled mercury quartz lamps where the defect is large. The water-cooled Kromayer type is just as effective and can be used interchangeably. Cold quartz lamps have not been employed because most of the ultraviolet rays emitted by this type of burner lie in or below the 2500 Angstrom unit range, which, although supposed to be highly germicidal, also is supposed to "unfavorably influence repair and is detrimental to the healing of wounds." Carbon-arc lamps with appropriate carbon electrodes might be used. An important adjunct to treatment is photosensitization of the wound by spraying it with a fluorescent dye so that the ultraviolet rays are concentrated and their effect inhanced on the ulcer. The solution used is mildly antiseptic and nonirritating. It is prepared by adding to 1000 cc. of sterile normal saline, one gram of eosin dye and 100 cc. of Merthiolate aqueous solution 1-1000 (not tincture). The ordinary commercial flask of sterile solution used in intravenous set-ups is most suitable and the dye may be dissolved in this solution or in the Merthiolate solution. The final concentration of the latter would approximate 1-10,000. Either dry sterile dressings or a sterile, bland ointment and then dressings are applied on completion of treatment. These should be given daily in most cases, although there are some few in which the decision is made to treat every other day. As a rule, four erythema doses are given initially, inasmuch as tissue denuded of its skin covering behaves very much like mucous membrane in tolerating large doses of ultraviolet (and large doses are the most effective in the infected wounds which occur very frequently). The dosage is stepped up gradually, one erythema dose at a sitting.

REFRIGERATION ANESTHESIA

H. Ogle Horner, M.D., Sayre, Pennsylvania

In THE AMERICAN JOURNAL OF SURGERY, 70;2;211 November, 1945

The use of refrigeration anesthesia for major amputations of the limbs is a sound surgical procedure. It is applicable in particular to the poor risk patient since there is scarcely any shock accompanying the procedure. It is possible to perform major amputations safely with this form of anesthesia in what formerly were hopeless cases because of debility or septicemia. It lowers the incidence of stump infections in those patients requiring amputation because of infection.

Pain is relieved in most instances after the application of cold, thus adding to the ease and comfort of the patient as well as facilitating preoperative preparation. The postoperative pe-

riod is likewise free from pain, and the patient may carry on without missing a meal. This is especially important in diabetics as the diet and insulin do not have to be changed.

There is ease and quickness of operation in these cases. Poorly nourished tissues may be saved although refrigeration will not restore devitalized tissue. Edema and drainage may be controlled postoperatively when necessary. There is a also reduction in the incidence of thrombosis and embolism.

This method of anesthesia is also valuable in severe crushing wounds of the extremeties or other injuries that require amputation.

This form of refrigeration is not intended to supersede other forms of anesthesia when the general condition of the patient is good, but is a valuable adjunct in the treatment of the poor risk patient.

PRACTICAL ASPECTS OF THE TREATMENT OF BURNS

Sigmund A. Siegel, M.D., F.A.C.S., New York, N. Y., Leonard V. Marrone, M.D., Utica, N. Y., and Donald Gordon, M.D., F.A.C.S., New York, N. Y.
(From the Surgical Service of Beekman Hospital, New York, N. Y.) In SURGERY, 18:3;305
September, 1945

Where applicable on limbs we have made use of the whirlpool bath to aid in separating sloughs and to improve vascularity under healed areas, which have been skin grafted as soon as they will tolerate moisture.

Contractures are combated by placing the limbs in extension and splinting them to prevent muscle spasm inducing contractures. If the dressings are voluminous enough they will sometimes be sufficient, provided they are made comfortable, which the thick grease dressing does. Where feasible, elevation is arranged by suspension from an overhead fracture frame, which permits movements, active and resistive, at the earliest possible time. We have used these "resisted" exercises in flotation to overcome muscle spasm and increase the range of motion of major joints. With the aid of pulleys at each end of the bed and light, graduated traction weights, the extensors and flexors are exercised alternately and independently. The value of this type of muscle exercise has been little appreciated. We have used them successfully in many types of injuries.

Such exercise tends to diminish all the factors which predispose to spasm, atrophy of tissue, and contractures, thus avoiding some of the sequelae of burns. The cooperation of the patient in doing these exercises cannot be obtained unless these movements are without pain or discomfort.

THE TREATMENT OF GONOCOCCAL ARTHRITIS WITH SULFONAMIDES AND ARTIFICIALLY INDUCED FEVER

Major Saul Solomon, Medical Corps, Army of the United States (Received for publication, April 2, 1945)
In AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, 29;5;574
September, 1945

Twenty-three cases of drug resistant gonococcal arthritis are reported. Of these, ten patients were treated with sulfonamides and artificial fever in the hypertherm with the following results: four were cured and the remainder showed either considerable or partial improvement. Fifteen were treated with sulfonamides and artificially induced fever with intravenous typhoid vaccine with the following results: six were cured, six were either considerably or partially improved; three were not benefited; two of the latter were subsequently treated in the hypertherm with good results.

The result with both of these methods was encouraging. The use of the hypertherm is preferable to the use of vaccine. The most important consideration, however, is early treatment. Hence, if the hypertherm is not available, combined vaccine and sulfonamide therapy should be instituted without delay.

It is emphasized that specific therapy does not supplant the regular methods of management of arthritis which include bed rest, special diet, and physiotherapy. Specific therapy is used in addition to these and results in a much greater percentage of cures and in the restoration of joints to useful function.

Extreme care must be exercised to ensure that no cases be stigmatized with the diagnosis of tuberculosis or tuberculosis suspect on one roentgenographic observation. Careful clinical history and physical examination are still required for diagnosis.—Carleton B. Peirce, M.D., et al., Am. Rev. Tbc., July, 1945.

Industrial Health

Committee On Industrial Health — Jos. H. Chivers, Chm., 836 S. Michigan Ave., Chicago 5, Frank P. Hammond, H. A. Vonachen, R. I. Barickman, C. O. Sappington, Milton H. Kronenberg.

CANVAS-LINED GLOVES CAUSE EXTENSIVE DERMATITIS

Five outbreaks of contact dermatitis traceable to the use of a canvas-lined glove impregnated with Buna N rubber are reported by the Division of Industrial Hygiene, Indiana State Board of Health. All gloves were made by one manufacturer, but it is expected that the glove is no longer being issued. By substituting neoprene gloves, the dermatitis cleared up.

Thirty-three dermatitis cases were seen out of 303 employees using the gloves. Jobs that caused profuse sweating, produced friction, and required the constant wearing of the glove invariably brought on the dermatitis which was usually localized primarily to the back of the hand and then spread to the forearm. The initial incubation period varied from 14 to 21 days.

Industrial Hygiene Division,
U. S. Public Health Service.

INSTRUMENT SALVAGE PRESENTS SERIOUS RADIUM HAZARD

Termination of Government contracts for instruments and other war materials containing radium may create a widespread radium hazard, unless proper control measures are taken. With the probability that these materials would be salvaged by individuals who are unaware of the dangers of radium exposure, the War Production Board, U. S. Public Health Service, and Army Service Forces and Air Forces have taken steps to avert this threat.

Dr. Parran, Surgeon General of the U. S. Public Health Service, in a letter to the War Production Board, recommended that any disposal of salvaged war materials containing radium be prevented until safe methods of handling could be planned and effected. In view of the public health implications if these materials should get onto the open market, the cooperation of the Public Health Service was offered.

Divisions of the Army Service Forces and Air Forces responsible for termination of contracts and disposition of surplus property were urged by the Occupational Health Division, Army Medical Corps, to consider, in the termination of all contracts, the radium hazard involved and to inform each contractor concerned of the dangers as well as of arrangements made for proper disposal.

The Industrial Hygiene Division, U. S. Public Health Service, is prepared to notify all State and local industrial hygiene units of the potentialities of this problem and of steps they should take in attempting to control this hazard.

Of the many plants which have unused stocks, one plant alone has 10,000 radium painted dials on hand which would contain about 100 mg. radium. There is enough radium in some signal dials to be dangerous if ingested or inhaled by a worker while fumes from a melt containing many radium dials would be extremely perilous.

Attention was first brought to this problem by a plant medical director, who, having found that a number of radium dials had been sold to a salvage dealer as scrap brass, realized the impending danger and notified Dr. Robley Evans of the Massachusetts Institute of Technology. Dr. Evans, director of one of the two laboratories in this country in which radon determinations are made, requested that the entire excess stock be held for safe disposal and in turn noti-

fied the War Production Board. The U. S. Public Health Service first heard of this problem through the Massachusetts Division of Occupational Hygiene which has for a long time been active in the control of radium dial painting in various establishments in that State.

Proposals for disposition are under consideration. Unused material may be turned over to a competent laboratory for recovery of the radium with due regard to laboratory safety precautions. An alternative proposal is for the Government to buy up all parts containing radium and dump them at sea.

U. S. Public Health Service
Industrial Hygiene Division

TEAM WORK FOR BETTER HEALTH

In *Nation's Business* 8-45 John LaCerda tells how small plants in Philadelphia, by working together to provide adequate medical care for their employees, have succeeded in reducing occupational diseases, industrial accidents, absenteeism and labor turnover. The author says that costs obviously vary in proportion to the amount of care given, but, in all instances, employers questioned in a recent survey indicated that they felt the betterment of morale and, in some cases, the lessening of insurance costs through curtailment of industrial accidents more than offset the outlay.

Mr. LaCerda describes an unusual dispensary operated in a five story cement and stone building covering four square blocks in Philadelphia's great southwest section now occupied by 25 small concerns mostly garment workers. The building was formerly owned and occupied by the widely known yarnmakers E. B. & S. G. Fleischer Company, Inc., which discontinued operations in 1932. The new owners decided to lease floor space to small concerns and as an inducement offered prospective tenants the use of the dispensary which the Fleischer Company had previously maintained. Tenants were not obliged to share the dispensary which was to be run on a cooperative basis with the tenants — or rather those who desired — sharing the expense of the doctor and nurse. The owner was to provide the space itself rent free. The dispensary was immediately a factor in attracting tenants and today the 16 concerns who operate it are giving medical service to approximately 2,000 workers.

We are quoting the author:

"There is a trained nurse on duty five days a week. She looks after routine cases — minor injuries, colds, etc. A doctor, just out of the Army, pays frequent visits, responds to emergency calls and handles compensation cases and others which the nurse relays to him. It is apparent that the nurse plays an important part in this setup. — — —"

For 19 years a Philadelphian, Dr. Glenn S. Everts, has been devoting his full time to industrial practice in that city. For 16 of those years he was physician to five small companies; today, he has seven on his list.

Some of the plants he visits daily, others twice a week. All the plants make part or full use of registered nurses and of help supplied by the National Organization for Public Health Nursing (visiting nurses), which has branches in many major cities. In Philadelphia, a small plant can get the services of a visiting nurse for $2.30 an hour. — — —

The average company on Dr. Everts' call-list in Philadelphia spends on health $9.50 per employee each year. This is an over-all charge and includes cost of personnel, supplies, etc. Medicine, labor and industry have joined hands to make the Philadelphia industrial-medicine story a success. "It was apparent from the beginning that the medical profession would face an impossible task were it to try to handle the problem singlehanded," says Dr. Charles-Francis Long, chairman of the commission on industrial health and hygiene of the Medical Society of the State of Pennsylvania.

As an early step in the program, the Philadelphia County Medical Society offered a 48-hour course of instruction on industrial medicine to doctors and nurses. Sixty physicians attended — — —

Next, the Pennsylvania State Department of Health made a survey of Philadelphia industries to determine how many of the more than 5,500 manufacturing establishments had medical service. It was found, as Dr. Long puts it, that those with 500 or fewer persons on the pay roll were "woefully ill equipped or completely lacked any medical service."

It was found, coincidentally, that 90 per cent

of the city's industrial workers were employed in small plants. — — —

Fortunately, the Chamber of Commerce and Board of Trade already had a health committee. This was expanded to about 40 members to include widely known medical men in the industrial field. — — —

Eventually, 178 companies were selected as prime objectives to whose officers the Chamber sent a series of letters inviting them to meetings where details of costs, services, etc. were given. — — —

Employers were encouraged to introduce one or more of the following: Pre-placement physical examinations; periodic health examinations; special hazard examinations such as tests against occupational lung ailments, etc.; care of minor accidents which without ambulatory treatment might mean absence from work; medical care of such "usual" ailments as colds and headaches; accident prevention and elimination of hazards through cooperative effort with shop superintendents.

To tell small industry how to tackle a health project, the Chamber printed a pamphlet. Simply written in question and answer form, and free to all who were interested, the booklet advised optional plans. Mr. LaCerda's article summarizes these.

PENICILLIN CANNOT REPLACE SURGERY IN LUNG INFECTIONS, SAYS DOCTOR

Penicillin cannot serve as a substitute for surgery in the treatment of empyema, according to J. Karl Poppe, M.D., of the Department of Surgery, Washington University School of Medicine, St. Louis.

Writing in the October 6 issue of *The Journal of the American Medical Association,* Dr. Poppe, who is also associated with Barnes Hospital, says that in the early stages of the infection, penicillin may be effective but to "use penicillin to avoid drainage of . . . . pus appears to represent poor judgment and undue optimism."

Although the author believes there is a possibility of arresting the infection over a period of months with large doses of penicillin, he points out that this can be done only at great expense to the patient. Moreover, there is a tendency toward an unsatisfactory result in such treatment, he said.

According to Dr. Poppe's experience with penicillin in over 150 lung cases of all types, the best treatment is to use penicillin extensively during the first two or three weeks after the onset of the infection in the attempt to prevent the development of empyema. If this fails, penicillin cannot take the place of drainage by surgery. The pus in the chest cavity must be drained if it has accumulated and damaged tissue must be cut away.

Infant mortality is the only numerical measure available for health trends, but the brunt of deterioration in diet is borne by adolescent children, who are especially susceptible to tuberculosis. The average town child in Europe is underfed, short of vitamins and too hungry to concentrate. The father may be dead, a prisoner of war or a deportee, and the child may spend the day in search of food, too weak for exertion, without soap to keep clean. It is on this decimated enfeebled generation that the reconstruction of Europe will depend. Foreign Letters, J.A.M.A., May, 1944.

From the medicine man of old to the modern clinic is a long way. Again and again mystery after mystery has been probed; again and again the utterly impossible has won acceptance against ancient truth; again and again the reach of medicine has been enlarged. The doctor's craft, with triumph after triumph to its credit, is still on its way. Yet it is set with a larger problem of human well-being which up to now has hardly been explored. It will not be solved until we learn to make culture in all its color and drama an instrument of health. Wendell Berge, Ass't. Att'y. Gen'l. of the U. S., Pub. Health Rep., Jan., 1945.

Medicine and the Armed Forces

15,000 PHYSICIANS, 5,000 DENTISTS MADE ELIGIBLE FOR DISCHARGE

In line with its policy of returning doctors and dentists to civilian life as rapidly as the Army's medical needs decline, the War Department has made an additional group of 15,000 physicians and 5,000 dentists eligible for discharge.

Announcement of the new eligibility standards was made by Secretary of War Robert P. Patterson at the same time that he received a report from Major General Norman T. Kirk, The Surgeon General, showing that discharges of Army doctors were now running six weeks ahead of the schedule announced on September 14. Discharges of dentists are four weeks ahead of schedule.

Since V-E Day, more than 15,000 physicians have been released from the Army. Under the original schedule, 13,000 were to have been returned to private practice by January 1. The 15,000 already released represent nearly one-third of the total number in the Army at the time of the German surrender. With the additional group made eligible by this recent announcement, two-thirds of the physicians in the Army as of V-E Day will be eligible to resume civilian practice.

Release of dentists since Germany's defeat totals more than 3,500. The original schedule called for the release of this number by January 1. The peak strength of the Dental Corps was 15,000. The 8,500 dentists discharged or made eligible under the new standards represent more than 55 per cent of this strength.

To effect the additional discharges, the critical score for physicians and dentists has been reduced from 80 to 70. The score of 70 for medical personnel is 3 points below the December 1 score for officers in other branches of the Army, and is designed to insure the speediest possible release of men needed in their home communities to provide medical care to the civiliian population.

The time factor for physicians and dentists has also been cut. Instead of service prior to Pearl Harbor, medical personnel will now be eligible for release if they have had 42 months of honorable service. This compares with a requirement of four years and three months service for officers outside the Medical Department. In addition, any physician or dentist who is 48 years of age to his nearest birthday is eligible to return to civilian life.

The new standards will apply to all Medical Corps officers except for those in certain scarce categories. For plastic surgeons; eye, ear and nose specialists; orthopedic surgeons and internal medicine specialists, the discharge requirement will be 80 points or continuous service since Pearl Harbor. A requirement of 70 points or 45 months service has been established for gastroenterologists; cardiologists, urologists, dermatologists, anaesthetists, psychiotrists, general surgeons, physical therapy officers, radiologists and pathologists.

The number of doctors in these categories is relatively small but they are essential to the effective care of the 115,000 sick and wounded patients returned from overseas who are now in Army General Hospitals in this country. In the case of all Medical Department officers, provision is made for their retention on duty for a period of not more than 90 days if their services

are essential and no replacement is available.

Secretary Patterson has directed that transportation priority be given to medical personnel eligible for return from Europe and the Pacific in order that there may be no delay in their arrival in this country. He has also designated two officers to go to Europe as his personal representatives to make an exhaustive investigation of the release of medical officers there. A similar investigation was recently completed in the Pacific area.

The liberalized standards announced apply not only to doctors and dentists but to nurses and other Medical Department personnel. The point score for nurses has been cut from 35 to 25 and the discharge age from 35 to 30. Nurses will also be eligible for discharge after two years of service. Those on duty in the United States who are classed as limited service have been added to the list of those qualified for discharge. It is estimated that this will make 12,500 nurses eligible for release, in addition to the 27,000 who have already been qualified to return to civilian life. Twenty-two thousand nurses have been discharged to date. The peak strength of the Army Nurse Corps was 57,000.

For officers of the Medical Administrative Corps the score has been dropped from 70 to 60, and the pre-Pearl Harbor service requirement has been eliminated and the time of service required for discharge cut to 42 months. The age requirement stays at 42 for MAC officers. Four thousand officers are made eligible for discharge under the new standards.

The score for physical therapists has been reduced from 40 to 25 and the age requirement from 40 to 30. Two years of service will also qualify a physical therapist for discharge. Five hundred women officers are affected.

Three hundred additional dietitians have been made eligible to leave the Army by a cut in their score from 40 points to 30 and in their age requirement from 40 to 35.

Officers of the Sanitary Corps will need 60 points for discharge, instead of 70. They will also qualify for release if they have had 42 months of service or are 42 years old. For officers of the Veterinary Corps the score has been cut from 80 to 70. It is estimated that 350 Sanitary Corps officers and 400 Veterinary Corps officers will leave the service as a result of the liberalized rules. The following chart shows the revised Medical Department criteria:

Corps	*ASR*	*Service*	*Age*
Med. Corps	70	42 mo.	48
Dental Corps	70	42	48
Med. Admin. Corps	60	42	42
*Nurses	25	24	30
*Phys. Therapists	25	24	30
*Dietitians	30	not a factor	35
San. Corps	60	42	42
Vet. Corps	70	42	42

*Married or have dependents or are limited service in the U. S. are eligible for separation, regardless of points, length of service, or age.

★ ★

SECRETARY OF WAR ORDERS STUDY ON DOCTORS AND DENTISTS RELEASE SITUATION

Personal representatives of the Secretary of War have departed for Europe to make an exhaustive study on the release of Army doctors and dentists, Major General Norman T. Kirk, The Surgeon General of the Army, has announced.

Colonel Bolling R. Powell, Jr., of the Legislative and Liaison Division, of the War Department General Staff, and Colonel Durward G. Hall, Chief of Personnel Service of The Surgeon General's Office, who have been appointed to serve as personal representatives of the Secretary of War, left Washington December 1 to visit all European areas where Army doctors and dentists are stationed.

Colonel Powell and Colonel Hall have been given full power by the Secretary of War to make a complete investigation of all pertinent facts relating to Army doctors and dentists so that all necessary steps can be taken to expedite the return of all doctors who can be spared.

A similar investigation was recently completed in the Pacific area.

They will determine the medical and dental strength now necessary for each overseas theater so that all surplus professional officers can be immediately shipped out and either be released or assigned to replace doctors who are eligible for release.

Plans are under way for the issuance of radio directives for the return of surplus personnel, and the highest transportation priority will be arranged in order to speed up this program.

In addition to studying the needed strength of doctors in each area, the Secretary of War's representatives will also investigate if there has been any undue delay in returning doctors who have been declared surplus and if so, make recommendations for the immediate correction of such situations.

Another phase of the study will be the determination of number of hospital beds needed to meet present conditions in the European theaters with the idea of releasing unnecessary beds.

An investigation is also planned in this country of Service Forces, Ground Forces and Air Forces installations to make sure that medical and dental staffs are cut as rapidly as their work loads permit, and the discharge criteria are kept adjusted so that those doctors who are actually surplus will be released at once.

In the meantime, The Surgeon General's Office announced that doctors and dentists are continuing to be released as quickly as possible under the new release policy. Figures on the release of doctors at the end of the week of November 30th reached a total of 15,469, which is in excess of the 13,000 quota which had been set for the end of the year. For the same period 3,539 dentists had been separated from the service.

★ ★

NEBRASKA REPRESENTATIVE MILLER PRAISES WORK OF MEDICAL SERVICES

The following statement, given by the Honorable A. L. Miller of Nebraska in the House of Representatives, is reprinted from the November 23, 1945 Congressional Record:

"Mr. Speaker, the record of the medical men and the medical service in this war is outstanding. It has never been equalled by any Army in any war. There were over 570,000 wounded in World War II, of whom 360,000 were returned to some type of duty. There were some 25,000 or approximately four per cent who died of wounds.

"In World War II, only six men in each 10,000 died of disease each year. This is a lower death rate in disease than that of civilians in the same age group here in the United States; yet these men lived in every part of the world under adverse physical and sanitary conditions. In World War I, 165 in each 10,000 died each year of disease, and these men were serving only in the United States and in Europe; the death rate in the Union Army in the Civil War was 712 per 10,000.

"The death rate from pneumonia has been reduced from 24 per cent in World War I to six-tenths per cent in this war. The death rate for meningitis has been reduced to four per cent in this war as compared to 34 per cent in World War I.

"I am sure, Mr. Speaker, that the Congress and the country can look with considerable pride upon this fine record of the medical service. There is no record in civil life or elsewhere to compare with this, and certainly a good job has been done in preventative medicine, as well as in the treatment of disease."

★ ★

ARMY EXCEEDS QUOTA ON RELEASE OF DOCTORS

The Army's quota of 13,000 doctors to be released to civilian life by December 31 has been exceeded six weeks in advance of the deadline, Major General Norman T. Kirk, Surgeon General of the Army, has announced.

The total number of doctors who have been separated from the service reached 13,320 for the week ending November 16. For the same week the total for nurses who have been retired came to 20,222 and the dentists total was 2,460, according to General Kirk.

Even though the December 31 quota has been attained sooner than expected, Medical Department officials pointed out there will be no slackening in the Army's efforts to return as many doctors to civilian life as possible in the quickest time.

From a peak strength of over 45,000 doctors, General Kirk has announced that all but 11,000 will be out of the service by the first of June. In order to do this the Army must continue to follow its policy of expediting the release of doctors as well as other Medical Department personnel in every way possible.

★ ★

NEW COURSE IN CARE OF ARTIFICIAL LIMBS INAUGURATED

The inauguration of a course of instruction in the repair and maintenance of artificial limbs has been instituted at Forest Glen, Walter Reed General Hospital, for the purpose of teaching

every amputee how to take eare of his own prostheses.

First suggested by Colonel Leonard T. Peterson, the Army's Director of research on prostheties, the program will deal with model limbs and various technieal deviees, and will instruct the amputees in the working and maintenanee of their prostheses.

Colonel Peterson pointed out that the Army's chief coneern in obtaining artifieial limbs is a proper fit, lightness and strength of the limb, and perfection in mechanical parts, and added that indieations of improvement are being made in a project now under development by Northrup Aviation.

Discussing the problems entering into the two and a half year Army amputation program, Colonel Peterson said that the Central Agency under the National Research Counеil on Prostheties plans to eontinue prosthetic research, so that anyone, after leaving the service, may benefit by the advancements made by the organization.

★ ★

MEDICAL DEPARTMENT PERSONNEL IN ETO GET TOTAL OF 22,304 AWARDS

Medieal Department personnel in the European Theater of Operations have received a total of 22,304 awards between the period of December 7, 1941 and October 1, 1945, ineluding 97 Distinguished Service Crosses and 2,849 Silver Stars, according to a reecnt announcement by the Office of The Surgeon General.

Enlisted men of the Medieal Department received 17,974 of the awards, officers 3,758, and nurses 572.

The 32,000 offieers of the medieal serviee in this theater (not ineluding nurses) reeeived four Distinguished Service Crosses, 196 Legions of Merit, 4 Clusters to the Legion of Merit, 200 Silver Stars, 20 Clusters to the Silver Star, 304 Soldier's Medals, 2,716 Bronze Star Medals, 308 Clusters to the Bronze Star, 3 Air Medals, and 3 Clusters to the Air Medal.

The Congressional Medal of Honor was received by one of the 202,000 Medieal Department enlisted men in the European Theater of Operations. They also received 93 Distinguished Service Crosses, 16 Legions of Merit, 2,646 Silver Stars, 110 Clusters to the Silver Star, 202 Soldier's Medals, 13,779 Bronze Star Medals, 808 Clusters to the Bronze Star Medal, 227 Air Medals, and 92 Clusters to the Air Medal.

Of the maximum number of 17,838 nurses serving in this theater, four were killed in aetion, one was taken prisoner, and seventeen received the Purple Heart. They reeeived 5 Legions of Merit, 3 Silver Stars, 4 Soldier's Medals, 322 Bronze Star Medals, 1 Cluster to the Bronze Star Medal, 219 Air Medals, and 18 Clusters to the Air Medal.

The award totals listed are exelusive of the Purple Heart.

★ ★

ARMY TO RELEASE TWENTY-THREE HOSPITALS

Major Gen. Norman T. Kirk, Surgeon General of the Army, recently announced that the Army will release twenty-three hospitals out of its wartime peak of sixty-five by Jan. 1, 1946. These hospitals will be offered to the Veterans Administration or to the former owners of these hospitals. Additional hospitals will be released after the first of the year.

The peak load of hospitals in the United States, reached at the end of June 1945, was 318,000 and has been dropping slowly ever since, despite the influx of men from overseas theaters. The Medical Department estimated that by Jan. 1, 1946 this total will have deelined to about 220,000 patients and that by June 1947 there will be only 70,000 men remaining in army hospitals.

★ ★

NEW CHIEF NURSE AT GARDINER GENERAL HOSPITAL

Major Floramund F. Difford, A. N. C., was recently named chief nurse at Gardiner General Hospital, Chieago, to succeed Major Nellie M. Denison, who is retiring after twenty-seven years' serviee with the Army Nurse Corps. A member of the Army Nurse Corps since 1936, Major Difford was serving in the Philippines at the time of the Japanese invasion. After the fall of Manila she and a number of patients and doctors were smuggled out to Australia, where she stayed until November 1944. Since that time she has been stationed in the United States.

★ ★

1,250,000 MEN GIVEN PHYSICAL EXAMINATIONS IN OCTOBER

According to a recent release from the War Department, more than 1,250,000 men were physically examined during the month of Oc-

tober before being discharged from the Army. Major Gen. Norman T. Kirk, Surgeon General of the Army, stated that every man released from the service will be given the ultimate medical care before returning to civilian life. He also pointed out that, in order to speed demobilization, the complete physical check on the average soldier is performed by eight doctors in one hour, provided the man has no ailment.

★ ★

DEFERMENT AND DECELERATION IN MEDICAL EDUCATION

The following State Directive Advise No. 322 was issued December 3 from National Headquarters of the Selective Service System by Lewis B. Hershey.

1. Local Board Memorandum No. 115 provides for consideration for the deferment of registrants who are pursuing a full time course of study in a recognized school of medicine, dentistry, veterinary medicine or osteopathy until their graduation if they have completed a satisfactory preprofessional course prior to their entrance, provided that a student of veterinary medicine should not be considered for occupational deferment if he commenced his course in veterinary medicine on or after March 15, 1945.

2. Students who are entitled to consideration for deferment under such provisions shall not be required to pursue an accelerated course of study in a recognized school of medicine, dentistry, veterinary medicine or osteopathy, provided that the course of study includes at least nine months of study and not more than three months of vacation in each calendar year.

3. Local boards will consider such students for deferment during the usual three month vacation period if it is certified by a responsible official of the school that the students are, in fact, bona fide students and are saitsfactorily pursuing a full time course of study.

See New Exhibits —

Hear New Papers —

Meet Old Friends —

AT YOUR ANNUAL MEETING

Palmer House, Chicago, May 14, 15, 16

News of the State

PERSONALS · COMING EVENTS · MARRIAGES · DEATHS

BOONE COUNTY

Gordon Kaske of Belvidere has been promoted from lieutenant-commander to commander in the medical division of the naval reserve. Dr. Kaske has resumed practice in the Belvidere clinic following his terminal leave from Great Lakes station hospital where he was stationed the past year.

BUREAU COUNTY

Princeton physicians were hosts to about 100 doctors and surgeons of the North Central Medical association who gathered there for their 69th annual meeting. Dr. K. M. Nelson of Princeton is president of the group. Capt. P. V. Hall of Princeton, recently returned from overseas spoke on "Types of Anesthesia in an Evacuation Hospital."

CARROLL COUNTY

Edmund A. Flexman formerly of Chicago, recently released from the medical corps of the army will start practicing in Milledgeville, February 1st.

CHAMPAIGN COUNTY

The regular meeting of the Champaign County Medical Society was held December 13th. Dr. N. C. Gilbert, Northwestern University, was the speaker and his subject "Coronary Heart Disease."

COOK COUNTY

The Charles Sumner Bacon Lectures for 1945-1946 will be delivered at the University of Illinois on January 16 and 17, by Carl R. Moore, Ph.D., Professor of Zoology and Chairman of the Department, University of Chicago. The program will be "Studies in the Biology of Sex." On January 16th the subject will be "The Role of Sex Hormones in the Differentiation of the Reproductive System" and on January 17th "Some Aspects of Development in the Uterus, and in Ovaries Subjected to Experimental Treatment."

Robert D. Beer, assistant manager of Hines hospital for the last three years has been named manager to succeed Charles G. Beck. Mr. Beck has been appointed deputy administrator of the veterans administration in charge of the Chicago branch office.

Herbert B. Erikson has been released from the Army after three years' service and has opened offices in Chicago.

The tenth Christian Fenger Lecture of the Institute of Medicine of Chicago and the Chicago Pathological Society will be delivered at the Palmer House on January 14 by Lieut. Col. Baldwin E. W. Lucke, deputy director, Army Institute of Pathology, Office of the Surgeon General. His subject will be "Epidemic Hepatitis."

To celebrate the twentieth anniversary of his chairmanship of the department of surgery, University of Chicago School of Medicine, residents, present members and past members of the department of surgery gave a dinner December 4 in honor of Dr. Dallas B. Phemister. The surgical residents staff presented a program at Billings Hospitals in the afternoon. At an evening banquet a special bound volume of the December issue of the Annals of Surgery, which consisted of contributions of Dr. Phemister's pupils and former associates, was presented to him.

J. C. McMillan, Jr., until recently a commander in the USNR, reopened his offices in Oak Park.

Sidney M. MacLeod has resumed the practice of medicine in Chicago after three years of absence. Dr. MacLeod was a lieutenant-

colonel in the Army and served 11 months overseas.

Arthur R. Metz, Chicago was elected president of the Western Surgical association at its 53d annual meeting.

Geo. H. Rezek has been promoted to the rank of assistant professor on the clinical staff of the University of Illinois College of Medicine.

Charles R. Bloom will soon resume his practice in medicine in Cicero after an absence of four years and nine months with the Army.

Lt. Maxine Lewis of Chicago, one of the first six air transport command flight nurses to fly missions of mercy in both the European and Pacific theaters, received the air medal for her two ocean service. She is a former Cook County hospital nurse and has agreed to serve another year in flight nursing for ATC.

Harold X. Rubin, discharged in October after three years of service in the army, recently reopened his offices in Chicago.

Brig. Gen. John A. Rogers has been appointed surgeon general for the 6th service command. Gen. Rogers was chief surgeon for the American 1st army in Europe.

The American College of Surgeons granted fellowships to U. G. Dailey, chairman, department of surgery, Provident Hospital, Roscoe C. Giles, also of the Provident staff, a former lieutenant-colonel in the Army, and Carl G. Roberts, former chairman of Provident's department of surgery.

Col. Paul A. Campbell, Chicago, recently received an award of wings as an honorary flight surgeon of the French Air Forces as a result of his work in aeromedical research. Colonel Campbell recently returned from the European theater, where as a member of an air staff team studying medical services of the German air force, he traveled through Germany compiling medical data for study by Air Force personnel. As director of research of the School of Aviation Medicine, Randolph Field, Texas, Colonel Campbell personally supervised and directed many projects which have been instrumental in increasing the efficiency performance and safeguarding the health of combat crews.

Herman L. Kretschmer, Past President of the American Medical Association, was recently elected chairman of the board of editors of the Journal of Urology.

William H. Cassels has been promoted from associate professor of anesthesia to professor of anesthesia at the University of Illinois College of Medicine.

The twenty-second Lewis Linn McArthur Lecture of the Frank Billings Foundation will be delivered at the Palmer House, February 22, by Dr. Armand J. Quick, professor and director of the department of biochemistry, Marquette University School of Medicine, Milwaukee. His subject will be "The Coagulation of the Blood: Theoretical and Practical Aspects."

At the recent annual meeting of the board of trustees of the Hektoen Institute for Medical Research of the Cook County Hospital, Dr. Samuel J. Hoffman was appointed administrative director of the institute. Dr. Karl A. Meyer is president of the board. Dr. Steven O. Schwartz, hematologist for Cook County Hospital, was appointed hematologist to the Hektoen Institute.

Comdr. Signey Sideman has been released from the navy and expects to return to Chicago to resume his practice soon.

John G. Bellows has been discharged from the army and resumed his practice of medicine in Chicago.

Dr. Max Thorek received the highest civilian decoration of the Peruvian Government — the "Order of the Sun" — during the Tenth National (Victory) Assembly of the United States Chapter of the International College of Surgeons, held in Washington, D. C. December 8th, 1945. The decoration was conferred by Dr. Humberto Fernandez-Davilla, Minister Counselor of the Embassy in Washington, in recognition of Dr. Thorek's "contributions to surgical science and for his brilliant work as founder of the International College of Surgeons."

Lt. Colonel Tibor Benedek, M.C. has returned from the Asiatic-Pacific Theater of Operation.

DU PAGE COUNTY

Ernest S. Watson has returned to his practice in Glen Ellyn and Wheaton after serving more than three years in the Army Medical Corps.

EDGAR COUNTY

Dr. and Mrs. C. L. Kerrick of Chrisman celebrated their golden wedding anniversary November 18. Dr. Kerrick began practice in Chrisman fifty-two years ago and is still active in his profession.

F. B. Weaver, Kansas, and J. W. Martin, Paris, were elected President and Vice-President, respectively, at the Annual Meeting of the Edgar County Tuberculosis Association.

HENRY COUNTY

Commander F. J. Stewart, Kewanee physician and surgeon who entered service of the U. S. naval reserve 38 months ago, has returned to this country after 15 months duty in the South Pacific.

Thomas B. Carney, Kewanee, has resumed practice of medicine since his return from military service.

JERSEY COUNTY

Capt. Robert G. Mindrup, who served 17 months in the European theater with the Army Medical Corps, has returned to Jerseyville and will resume the practice of medicine January 1st.

LAKE COUNTY

Donald E. Rossiter has been named president of the board of health of Highland Park, succeeding Morley D. McNeal, resigned.

Captain Carl E. Billings, Barrington, has been awarded the bronze star medal for meritorious service performed in combat operations against the enemy in Belgium and Germany during the first part of the year. Captain Billings services resulted in the saving of many lives which otherwise would have been lost.

LA SALLE COUNTY

Lieut. Col. Timothy Mullen, formerly of Seneca, Ill., was recently awarded the Bronze Star for meritorious service in support of military operations against the enemy in northern Luzon and the Philippines from February 15, 1945 to May 10, 1945. Dr. Mullen graduated from the University of Illinois College of Medicine, Chicago, in 1927 and entered the service March 5, 1941.

LAWRENCE COUNTY

The Lawrence County Medical Society held a meeting November 28th in Lawrenceville. Dr. E. A. Fahnestock, formerly a major in the U. S. Army related some very interesting experiences during the war.

LIVINGSTON COUNTY

Carl F. Ward has returned to Pontiac after three years with the armed forces and has resumed practice of medicine.

McHENRY COUNTY

Captain B. B. Neuchiller has returned from 27 months active duty in the Pacific and after a much needed rest will resume his profession again.

William H. Newton has been discharged from the army and expects to resume his practice in Woodstock soon.

McLEAN COUNTY

The regular meeting of the McLean County Medical Society was held December 11th. Dr. I. Davidsohn, Director of the Department of Pathology at Mt. Sinai Hospital in Chicago spoke on the RH Factor, Clinical and Practical Considerations.

Comdr. Howard P. Sloan has received his discharge from the navy and will resume his medical practice in Bloomington shortly.

Harry C. Barber, Normal physician and surgeon, has resumed his practice in Normal and expects to reopen his office at its former location shortly.

N. S. Beebe, who recently received his discharge from the service, has opened his office in Colfax.

Ralph P. Peairs, Normal, was named president of the board of directors of the McLean County Health unit at an organization meeting held recently.

MACON COUNTY

Two Monticello physicians have been discharged and are returning to Monticello to resume practice. Dr. A. T. Hume spent three years in the service, several months of which was spent with a medical unit in Persia. Dr. George A. Sexton spent nearly three years at various medical installations in the Southwest Pacific.

The Macon County Medical Society held a Scientific Meeting and Pheasant Dinner at the Decatur Club, December 6th. Dr. Harry A. Oberhelman, Professor of Surgery, Loyola University discussed Appendicitis in Infants and Children.

MADISON COUNTY

Dewey M. Roberts a physician and surgeon

in Alton has reopened his office after almost three years in the naval medical corps.

E. R. Quinn recently returned from three years of service in the army medical corps has resumed practice in East Alton.

Ben H. Barbour, recently discharged from the army medical corps with the rank of captain, has resumed the practice of medicine in Centralia.

PEORIA COUNTY

George Borin has returned to Peoria to resume the practice of medicine. Dr. Borin had been studying in New York City, but since the death of his father, the late Dr. W. A. Borin, he has decided to return to his practice.

Roland A. Slater has returned after two years spent in China as a major in the U. S. army medical corps and will resume his practice in Peoria following a short course of special training in proctology.

Paul Dirkse, head of the X-ray Department at St. Francis hospital, David W. Fey was elected vice-president and Edward J. Giunta was named new secretary-treasurer.

Carl Sibilsky, Peoria, has been discharged from the Army following 39 months of service and has resumed his practice of medicine.

At the December 4th Peoria County Medical Society's meeting, Dr. F. J. Hodges, Professor of Roentgenology at the University of Michigan, discussed "Chest Fluor-photography."

PERRY COUNTY

J. W. Stevens has been discharged from the U. S. Navy and has resumed the practice of medicine in DuQuoin.

PIATT COUNTY

W. R. Marvel has arrived home from service overseas and expects to resume his practice of medicine soon.

PIKE COUNTY

Lt. Comdr. Dilts has returned to Pittsfield to resume the practice of medicine after 18 months of duty as medical officer with a blimp squadron in Trinidad.

ROCK ISLAND COUNTY

The Rock Island County Medical Society held their regular meeting on December 11th. Mrs. Fred P. Cowdin discussed County Health Department.

ST. CLAIR COUNTY

The St. Clair County Medical Society announces the return of Drs. J. T. Haskins, C. E. Baldree, H. L. Lange, and C. H. Bauman to the practice of medicine after service with the armed forces.

Walter Wilhelmj of East St. Louis has been appointed acting director of the health district to fill the vacancy created by the death of Dr. Robert Farrier.

Eric Lehr, assistant county health officer, has been appointed acting health officer pending a permanent appointment by the county board of health.

Lt. Commander Blanchard Baird has been discharged from the Navy after more than three years service with the navy.

SANGAMON COUNTY

J. Marvin Salzman of Springfield, has returned to private practice after 37 months of overseas duty.

Major Nelson Chestnut has received his discharge from the army following three years of service.

STEPHENSON COUNTY

The Air Medal was recently awarded to Lieut. Richard Lawrence Merkel, formerly of Freeport, Ill., "for meritorious achievement in aerial flight as flight surgeon, Air Group 32, attached to the U. S. S. Langley, during operations in the enemy Japanese held Marshall, Caroline and Philippine Islands areas, from Jan. 29 to Sept. 23, 1944. Participating in numerous strikes and flights during this period, Lieutenant Merkel rendered gallant service and by his professional skill and courageous devotion to duty in the face of grave hazards contributed essentially to the maintenance of high morale in his air group and to the successful fulfillment of these vital missions. His exemplary conduct and fearless disregard for his own personal safety reflect the highest credit on Lieutenant Merkel and the United States Naval Service."

VERMILION COUNTY

At the Vermilion County Medical Society's annual meeting for the election of officers, Dr. H. E. Ross of Danville was named president, Kenneth Hammond, Hoopeston, vice president and Holland Williamson, Danville, secretary-treasurer. Harlan English and W. B. Smith, both of Danville were named as delegate and alternate, respectively. Dr. Edward Baumgart of Danville was voted into the society as a

new member. Dr. H. M. Streicher of Chicago was guest speaker, discussing The Clinical Application of the Newer Sulfonamides in Diseases of the Intestinal Tract."

Werner Fliesser has resumed his practice of medicine in Hoopeston after nearly three years service with the Medical Corps, U.S.N.

WAYNE COUNTY

David A. Gershenson has returned to Fairfield to resume his practice of medicine after having served with the armed forces for several years.

WARREN COUNTY

Dr. Russell M. Jensen, lieutenant commander in the U. S. Naval Reserve on inactive duty, has been awarded the Navy Unit Commendation for services rendered on Dec. 7, 1941, at Pearl Harbor. The commendation reads:

"By virtue of your services in the unit during the above period (December 7, 1941) you are hereby authorized to wear the Navy Unit Commendation Ribbon, which is transferred herewith.

"This authorization has been made a part of your official record in the Bureau of Naval Personnel.

"The commendation is issued by direction of Chief of Naval Personnel W. C. Palmer, Jr., lieutenant commander, USNR."

Dr. Jensen was on duty in the Naval hospital at Pearl Harbor at the time of the attack by the Japanese and remained in Hawaii and the Midway Islands until October, 1943, when he was transferred to the States for duty at the Naval hospital, Oceanside, Calif.

Early this year he received individual commendation for his services at Pearl Harbor, the recommendation being made by Admiral Nimitz shortly after he assumed command in the Pacific.

WINNEBAGO COUNTY

William K. Ford, Rockford, has resumed his practice of medicine following his release from the navy.

Maj. Courtney N. Hamlin expects to resume his practice of internal medicine soon.

Col. George C. Mayfield has been appointed post surgeon at Camp Grant succeeding Lt. Col. Ralph H. Fourser.

DEATHS

John W. Birk, Chicago. University of Illinois College of Medicine 1901. Had been on the obstetrical staff of Ravenswood. Practiced medicine in Chicago 37 years. Died December 8, 1945. Age 71.

Amos W. Ball, Rushville. Missouri Medical College 1886. Practicing physician in Schuyler county for more than 50 years. Died December 8, 1945. Age 84.

Delia Caldwell, Carbondale. Northwestern University Women's Medical School, 1895. Medical Examiner at S. I. N. U. since 1918. Died November 28th. Age 85.

Alfred de Roulet, Worth. St. Louis University School of Medicine 1903. Physician for 30 years. Died December 14th. Age 68 years.

Mercer Dickerson, Peoria. Barnes Medical College, St. Louis, 1908. General practitioner in Peoria for many years. Died December 2nd. Age 69.

R. C. Farrier, East St. Louis. University of Tennessee, Memphis, 1908. Had been director of the East Side Health district in East St. Louis since 1937. Died November 20th. Age 58.

Walter Frank, Lombard. Bennett Coll. of Ecl. Med. and Surg., 1910. Member of the staff at the Elmhurst Community Hospital. Died November 22nd. Age 60.

Frank O. Johnson, Granite City. Barnes Medical College, 1902. Practicing physician in the Quad-Cities for 42 years. Died November 29th. Age 68.

R. W. Karras, Lake City, Florida. Wisconsin College of Physicians and Surgeons 1912, formerly Chief Surgeon at the Veterans' Hospital, Dwight, Illinois. Died November 9th at Lake City, Fla. Age 57.

Sumner Miller, Peoria. Northwestern University School of Medicine 1899. President of the Illinois Public Health Association and since 1938 Peoria commissioner of health. Died December 15th after a seven month illness. Age 72.

John R. Sutter, Edwardsville. Washington University School of Medicine, St. Louis, 1907. Practiced medicine and surgery for nearly 40 years in Edwardsville. Died December 3rd. Age 64.

RELIEVE PAIN FROM ARTHRITIS

A-B-M-C OINTMENT

- dilates the arterioles and capillaries
- increases blood supply to the affected part
- relieves arthritic pain due to circulatory disturbances

Spread without rubbing and apply heat for twenty minutes. No danger of urticaria.

A-B-M-C OINTMENT

REG. U. S. PAT. OFF.

acetyl-beta-methylcholine chloride 0.25%

WYETH

Supplied in 1 oz. tubes.



Wyeth
REG. U. S. PAT. OFF.

WYETH INCORPORATED • PHILADELPHIA 3 • PA.

Donnatal RELIEVES SPASM WITH TENSION



In spastic disorders of functional origin—when the chief aim of therapy is to provide both central and peripheral action *with safety*—Donnatal may be employed with utmost confidence.

The outstanding efficacy of Donnatal is the result of a perfectly balanced combination of the principal belladonna alkaloids (hyoscyamine, atropine and scopolamine), in fixed proportions, together with phenobarbital. Thus Donnatal provides:

1. The advantages of the natural belladonna alkaloids *without toxicity.*
2. Effective *non-narcotic* sedation.
3. Marked pharmacologic potency with small dosage at *notably less cost.*

The synergetic implementation of Donnatal makes it an ideal antispasmodic and sedative in a wide range of spastic disorders—such as spasm incident to gastric and duodenal ulcers, pylorospasm, spastic constipation, urogenital spasm, cardiospasm, autonomic nervous disturbances, respiratory disturbances, Parkinsonism, vomiting of pregnancy, and other spastic manifestations.

AVAILABLE: In bottles of 100 tablets.

FORMULA: Each tablet contains belladonna alkaloids (hyoscyamine, atropine and scopolamine) equivalent to approximately 5 min. tr. belladonna, plus ¼ gr. phenobarbital.



FOR RELIEF OF SMOOTH MUSCLE SPASM

℞ DONNATAL 'Robins'

A. H. ROBINS COMPANY, INC. · RICHMOND 19, VIRGINIA

for "a potent estrogen effect

"with greater economy"

By prescribing Lynoral, the physician provides his menopausal patients with ethinyl estradiol which has "a potent estrogen effect . . . with greater economy" (1). It is "exceedingly active by mouth" (2) and produces a "definite therapeutic response" (1) in a dose as low as *one-fiftieth of a milligram!* Small wonder that Lynoral which induces gratifying menopausal comfort at such a surprisingly low cost has rapidly developed into the preferred estrogen for oral administration. Lynoral is available in 0.05-mg tablets (scored for easy dosage adjustment), bottles of 30, 60, and 250 . . . ROCHE-ORGANON, INC., Roche Park, Nutley 10, New Jersey.



Lynoral

'ROCHE-ORGANON'

(1) F. E. Harding, *Am. J. Obst. & Gynec.*, 48:181, 1944. (2) W. M. Allen, *South. M. J.*, 37:270, 1944.

ON THE *Nutrients Contained* IN CANDIES

Theoretically speaking, any food which contributes in some measure, to the satisfaction of all nutritional requirements, fills a worthwhile place in the human dietary. Many candies — in fact the majority of the kinds and types of candy consumed in the United States — fall into this category.

In the manufacture of many types of candies milk, butter, eggs, fruits, nuts, and peanuts are quantitatively important ingredients,* contributing their contained nutrients to the finished confections. To this extent therefore, they provide biologically adequate protein, valuable fat, quickly available carbohydrate, B-complex vitamins, and essential minerals.

The amounts of these nutrients contributed by candies compare favorably with those contained in weight-equivalent quantities of many commonly eaten desserts. Hence candies, eaten in reasonable amounts, as desserts and as between-meal snacks (especially when quick replenishment of expended energy appears advantageous), merit recognition as a desirable food in the daily diet.

*In 1943 the candy industry used 125,000 tons of nuts and peanuts; 10,000,000 pounds of fruits; 6,000,000 pounds of eggs; 400,000,000 pounds of dairy products, as well as 400,000,000 pounds of chocolate products.

THE NUTRITIONAL PLATFORM OF CANDY

1. Candies in general supply high caloric value in small bulk.

2. Sugar supplied by candy requires little digestive effort to yield available energy.

3. Those candies, in the manufacture of which milk, butter, eggs, fruits, nuts, or peanuts are used, *to this extent* also—

   a) provide biologically adequate proteins and fats rich in the unsaturated fatty acids;

   b) present appreciable amounts of the important minerals calcium, phosphorus, and iron;

   c) contribute the niacin, and the small amounts of thiamine and riboflavin, contained in these ingredients.

4. Candies are of high satiety value; eaten after meals, they contribute to the sense of satisfaction and well-being a meal should bring; eaten in moderation between meals, they stave off hunger.

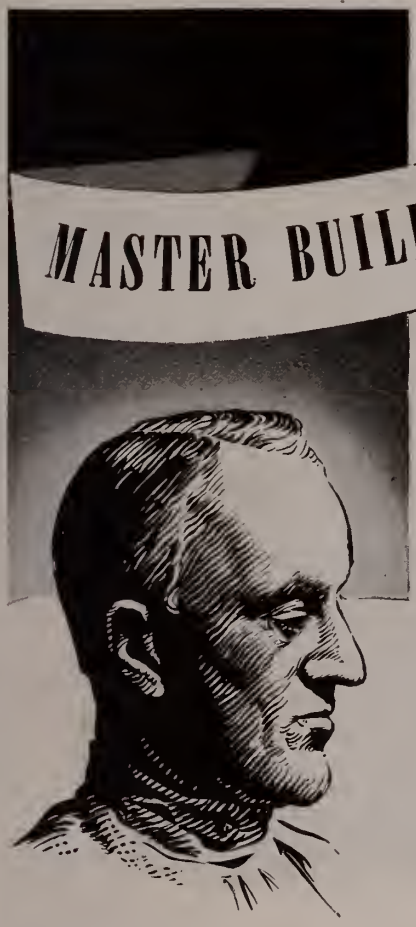
5. Candy is more than a mere source of nutriment — it is a morale builder, a contribution to the joy of living.

6. Candy is unique among all foods in that it shows relatively less tendency to undergo spoilage, chemical or bacterial.

This Platform Is Acceptable for Advertising in the Publications of the American Medical Association

COUNCIL ON CANDY
OF THE
NATIONAL CONFECTIONERS' ASSOCIATION
1 North La Salle Street • Chicago 2, Illinois

MASTER BUILDERS of ENDOCRINOLOGY



HARVEY WILLIAMS CUSHING
1869 – 1939

☆ ☆ ☆

Although best known for his outstanding contributions to neurosurgery, Cushing's greatness lay in an insatiable pre-occupation with the physiologic processes which underlie clinical manifestations. His rich genius laid the foundation upon which is built much of our understanding of the pituitary body and the gonads.

In sowing the seed, the pioneer has charged us with an obligation to attend the fruit with consummate care.

The Harrower Laboratory, Inc., takes pride in its responsibility for the maintenance of the high standards set by medical science. We are pledged to continued adherence to the most exact methods of research, development, and standardization in the preparation of superior endocrine and pharmaceutical products for the physician and research scientist.

THE HARROWER LABORATORY At Your Service GLENDALE CALIFORNIA

The HARROWER LABORATORY, *Inc.*
GLENDALE 5, CALIFORNIA
NEW YORK 7 DALLAS 1 CHICAGO 1

Announcing...

A *THERAPEUTIC* FORMULA FOR VITAMIN DEFICIENCIES

HYPERVITAM

A THERAPEUTIC VITAMIN FORMULA

Daily dose of 3 CAPSULES contains:

Vitamin A	30,000 U.S.P. Units
Thiamine (B_1)	30 mg.
Riboflavin (B_2)	15 mg.
Niacinamide	150 mg.
Pyridoxine (B_6)	3 mg.
Calcium Pantothenate	15 mg.
Ascorbic Acid (C)	300 mg.
Vitamin D	3,000 U.S.P. Units
Alpha Tocopherol (E)	30 mg.

HYPERVITAM* embodies 2 basic principles in the therapy of vitamin deficiencies:

1. MORE COMPLETE FORMULA—vitamin deficiency symptoms are almost always multiple, rarely single.
2. EXCEPTIONALLY HIGH POTENCIES—vitamin deficiency diseases should be treated with *intensive* dosage . . . in divided doses for maintaining more uniform blood levels.

U. S. VITAMIN CORPORATION *pioneers again!*

1936—with multiple vitamin-mineral diet supplement—VI-SYNERAL

1940—with injectable preparation of Vitamin B complex factors—POLY-B SPECIAL

1943—with aqueous preparation combining fat- and water-soluble vitamins—VI-SYNERAL VITAMIN DROPS

1945—with therapeutic vitamin formula—HYPERVITAM

*Trade Mark Reg. U. S. Pat. Off.

Available in soft gelatin oval capsules, in bottles of 30, 90 and 500

PROFESSIONAL SAMPLES AND LITERATURE AVAILABLE

U. S. VITAMIN CORPORATION, NEW YORK 17, N. Y.



WITHOUT COLOR, even Nature, with all her infinite powers, is handicapped in creating a picture of health. This is particularly true in secondary anemia.

To restore full color to defective, iron-deficient blood, Arsenoferratose ELIXIR has been the preferred hematinic of many physicians for over 20 years. Distinctive for its *palatability,* this organic-iron is readily accepted by both children and adults. Moreover, *it does not cause gastric irritation or stain the teeth.*

SUPPLY: **Arsenoferratose** and **Arsenoferratose With Copper,** 8 oz. and pint bottles. **Ferratose and Ferratose-C** (latter contains copper), pint bottles.

Literature and samples to physicians on request

RARE CHEMICALS, INC.
Harrison, New Jersey
West Coast Distributors: GALEN COMPANY, Berkeley 2, California

ARSENOFERRATOSE

Reg. U. S. Pat. Off.

PALATABLE HEMATINIC

RESTORES FULL COLOR TO DEFECTIVE, IRON-DEFICIENT BLOOD

821

Dietary Protein after Surgery and Other Trauma

apparently must be maintained at a level above normal in order to assure proper wound healing* and at least average resistance to infection.** The feeding of meat, therefore, in adequate amounts, as soon as it can be instituted, appears doubly advantageous: The protein content of meat is high and of highest biologic value; the human digestive tract appears well adapted for handling meat protein.**

*". . . in a variety of medical and surgical conditions there may occur a considerable depletion of body protein owing to a combination of factors, of which the two most important are a generally diminished protein intake and an enhanced protein catabolism. This situation inhibits wound healing, renders the liver more liable to toxic damage, impedes the regeneration of hemoglobin, prevents the resumption of normal gastrointestinal activity and delays the full return of muscular strength. It is obvious that to meet the situation an adequate supply of proteins and calories must be made available to the body. . . . This implies at least 150 Gm. of protein and 3,500 calories, with as much as 500 Gm. of protein daily when trauma has been severe, as in serious burns." (Hoff, H. E.: Physiology, New England J. of Med. 231:492 [Oct. 5] 1944.)

**"Cannon . . . cites the evidence which indicates that diminished protein intake lowers resistance to infectious disease, and corroborates it by his own experiments . . . it seems probable that the small intestine is better adapted for handling protein (especially meat protein) than for other types of food. . . . It is especially well supplied with enzymes which attack protein, and the digestion of meat has been shown to be more complete than that of foods of vegetable origins." (Crandall, L. A., Jr.: The Clinical Significance of the Plasma Proteins, Memphis Med. J. XIX:147 [Oct.] 1944.)

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

AMERICAN MEAT INSTITUTE

MAIN OFFICE, CHICAGO . . . MEMBERS THROUGHOUT THE UNITED STATES



A DEER'S FOOT, warmed and rubbed over the affected part, was one of the most popular folklore remedies for itching a century ago.

THE PICTURE HAS CHANGED

NOW... it's Enzo-CAL for ITCHING



Available in 2 oz. tubes and 16 oz. jars at any pharmacy.

Containing semi-colloidal calamine and zinc oxide with benzocaine, ENZO-CAL provides prompt relief of itching in pruritus ani, pruritus vulvae, intertrigo, eczema, diaper rash, sunburn, the rash of chickenpox and scarlet fever, and skin excoriations.

ENZO-CAL is a flesh-colored, *greaseless* cream that will not stain clothing or linens.

Write us at 305 East 45th Street, New York 17, N. Y. for a free sample of ENZO-CAL.

CROOKES *Laboratories*



at home, in your own country

To those of you who left your homes to serve your country we extend a warm and friendly welcome, a happy welcome home. The extraordinary service the medical profession gave in the war can't be told here. Here we want to say how glad we are to have you back again, away from the heavy change of war; back into your proper sphere, back again into your peace-time practice, back to a long, peaceful, happy service in the nation's health. ▸ ▸ ▸ Back again at home, in your own country.

GENERAL ELECTRIC X-RAY CORPORATION

PAIN
IN HERPES ZOSTER



In herpes zoster, "pain is likely to be troublesome in direct proportion to the age of the patient. In the youth it is seldom a problem; in the aged it may persist for months."*

*Simons, D. J., and Wolff, H. G.: (Management of Chronic Diseases of the Nervous System): M. Clin. N. Am. p. 434, March, 1944.

'TABLOID'

'Empirin' COMPOUND

In bottles of 100 and 500 • *Each product contains—Acetophenetidin gr. 2⅛ • Caffeine gr. ¼ • Acetylsalicylic Acid gr. 3½ • Also 'Tabloid' 'Empirin' Compound with Codeine Phosphate • 'Tabloid' and 'Empirin' are Registered Trademarks*

BURROUGHS WELLCOME & CO. (U. S. A.) 9 & 11 EAST 41st ST., NEW YORK 17

254902



. . . the characteristic response

THE prompt symptomatic relief provided by Pyridium is extremely gratifying to the patient suffering with distressing urinary symptoms such as painful, urgent, and frequent urination, tenesmus, and irritation of the urogenital mucosa.

Pyridium is convenient to administer, and may be used with complete safety throughout the course of cystitis, pyelonephritis, prostatitis, and urethritis. *The average oral dose is 2 tablets t.i.d.*

PYRIDIUM
REG. U. S. PAT. OFF.
(Phenylazo-alpha-alpha-diamino-pyridine mono-hydrochloride)

For gratifying relief of distressing symptoms in urogenital infections.

Pyridium is the United States Registered Trade-Mark of the Product Manufactured by the Pyridium Corporation.

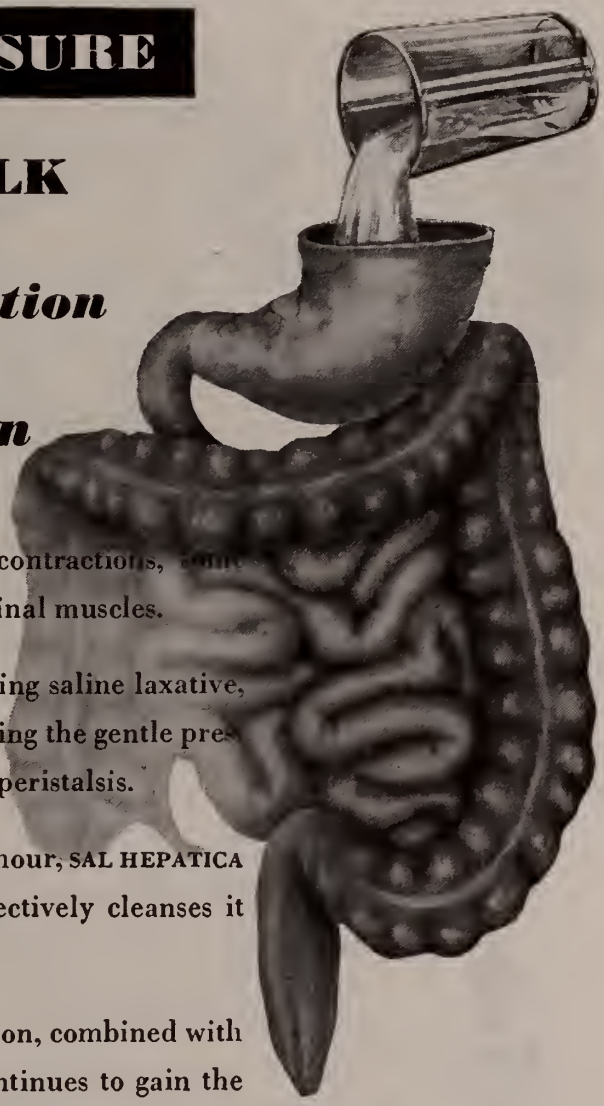
MERCK & CO., Inc. *Manufacturing Chemists* RAHWAY, N. J.

GENTLE PRESSURE

of LIQUID BULK

relieves constipation

without irritation



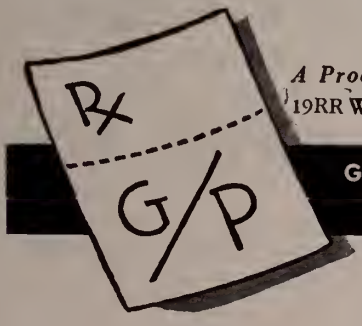
In order to reinforce peristaltic contractions, some laxatives act by irritating the intestinal muscles.

In contrast, SAL HEPATICA, a sparkling saline laxative, follows nature's own methods by using the gentle pressure of "liquid bulk" to stimulate peristalsis.

Acting promptly, usually within an hour, SAL HEPATICA flushes the intestinal tract and effectively cleanses it of waste.

Because of this quick yet gentle action, combined with its pleasant taste, SAL HEPATICA continues to gain the ever-increasing confidence of your profession.

SAL HEPATICA



A Product of BRISTOL-MYERS COMPANY
19RR West 50th Street • New York 20, N. Y.

GENTLE PRESSURE FOR GENTLE YET THOROUGH LAXATION





FIGHT INFANTILE PARALYSIS

To the parents of a stricken child there is nothing "light" about infantile paralysis, however comparatively mild the case.

Nor is this scourge lightly regarded by millions of Americans who are learning to evaluate its threat. Much credit for this advance in public interest and support is due to the unflagging efforts of members of the National Foundation for Infantile Paralysis.

Now, as every January since its inception in 1938, this group is conducting a great drive for funds to continue combating poliomyelitis with the finest research and skill known to medical science.

In co-operation with the current March of Dimes, January 14-31, Rexall Drug Stores across the country join in urging every American to work and give in behalf of this cause.

UNITED-REXALL DRUG CO.

Rexall DRUGS

PHARMACEUTICAL CHEMISTS FOR MORE THAN 42 YEARS

Los Angeles • Boston • St. Louis • Chicago • Atlanta • San Francisco
Portland • Pittsburgh • Ft. Worth • Nottingham • Toronto • So. Africa

Helps Shorten Calls For You

Give New Mothers FREE DAILY GUIDE BOOK

WRITTEN BY

Phyllis Krafft Newill, under direction of a leading pediatrician





Here is a guide book for mothers from the pre-natal period up through the romper age free for distribution to your patients.

No effort was spared to make "Bringing Up Baby" authoritative on feeding, care, and training. It was written by Phyllis Krafft Newill, co-author of "All About Feeding Children," the book selected by Parents' Magazine as one of the best of 1944. She worked under the supervision of a well-known pediatrician and psychiatrist, and the manuscript was read and approved by physicians before publication.

Short explanations of the food values in Quaker Enriched Farina constitute the only advertising matter (the widespread acceptance of this time-tested Quaker product as a "first cereal" . . . . . its added Vitamin "D," 2-B Vitamins, Calcium and Iron). All such matter is factual and restrained in style.

To get a sample copy, fill out and mail the coupon below. Note also that you may get any reasonable quantity shipped immediately, or have a designated quantity shipped periodically, as you instruct.

QUAKER ENRICHED FARINA

Mail This Request Coupon NOW

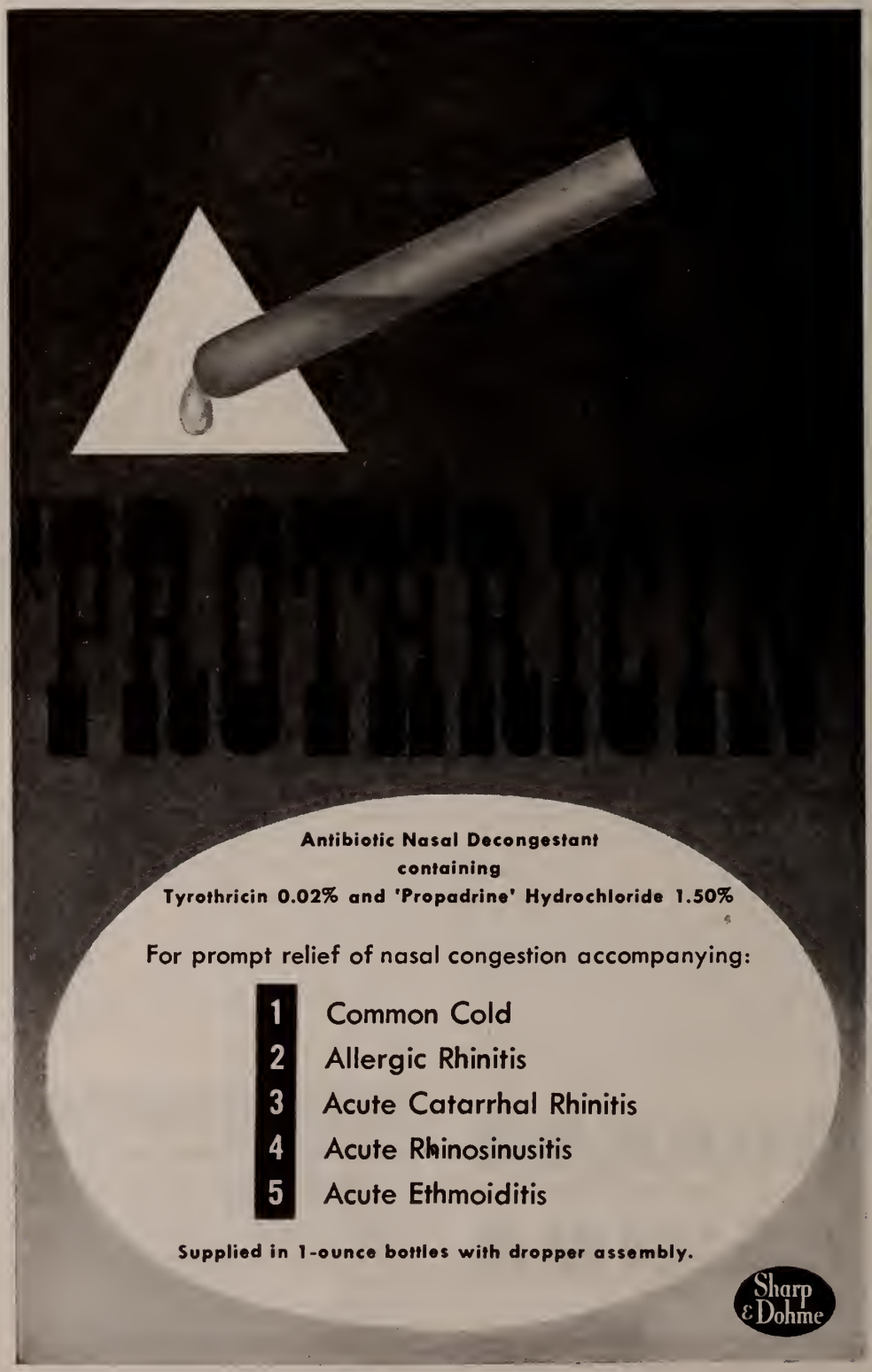
THE QUAKER OATS COMPANY, Box 712, Chicago, Ill.

Please send your new booklet, "Bringing Up Baby," in the following quantities: A sample copy___. Immediate shipment of___. Shipment of ___ every ___ weeks.

Name .....

Address .....

City.. ....Zone.. .State.....


Antibiotic Nasal Decongestant
containing
Tyrothricin 0.02% and 'Propadrine' Hydrochloride 1.50%
For prompt relief of nasal congestion accompanying:
1 Common Cold
2 Allergic Rhinitis
3 Acute Catarrhal Rhinitis
4 Acute Rhinosinusitis
5 Acute Ethmoiditis
Supplied in 1-ounce bottles with dropper assembly.
Sharp & Dohme

Specific Action

TO PROMOTE FAT DIGESTION

When fat digestion is impaired due to deficient bile secretion, and when fatty foods prove intolerable in the absence of gallbladder involvement, Degalol—the original, chemically pure deoxycholic acid—offers noteworthy advantages.

A constituent of human bile, it is the fraction chiefly concerned with fat emulsification, promoting the digestion and absorption of ingested food fats and the utilization of the fat-soluble vitamins.

In the dosage required, Degalol exerts little or no choleretic influence. Thus it proves superior to ordinary bile salts which not only are less potent in their influence on fat emulsification, but—since they are required in higher dosage—produce side actions which are frequently undesirable. The powerful choleretic influence of the bile salts, for instance, is definitely to be avoided in catarrhal jaundice, though fat digestion and vitamin absorption are to be enhanced.

DOSAGE

One or two 1½ gr. tablets t. i. d. Supplied in boxes of 100 sanitaped 1½ gr. tablets. Available on prescription thru all pharmacies.

When fatty foods lead to postprandial distress and epigastric pain, Degalol frequently proves specific. In suspected or frank deficiency of fat-soluble vitamins D, E and K and carotene, the administration of Degalol together with the vitamins is indicated.

Degalol
REG. U.S. PAT. OFF.

CHEMICALLY PURE DEOXYCHOLIC ACID

Riedel - de Haen, Inc. • New York 13, N. Y.



DUTY CONSCIOUS

Equally Effective in:
Constipation • Colitis
Diarrhea



•Zymenol Contains Pure Aqueous Brewers Yeast (no live cells)

Zymenol makes the bowel duty conscious by maintaining normal intestinal content through Brewers Yeast Enzymatic Action* and aiding restoration of normal intestinal motility with Complete Natural Vitamin B Complex.*

Natural urge to defecate is re-established without carthar-sis, artificial bulkage or large doses of mineral oil.

Economical teaspoon dosage avoids oil leakage and does not affect vitamin absorption.

Write for FREE Clinical Size

for contraceptive effectiveness . . . prescribe Koromex Jelly with confidence . . .



The active ingredient of Koromex Jelly is phenylmercuric acetate, whose remarkable contraceptive efficiency was affirmed in the illuminating report by Eastman and Scott (Human Fertility 9:33 June 1944). Their clinical and experimental data confirmed the earlier findings of Baker, Ranson and Tynen (Lancet 2:882 October 15, 1938). In addition to its excellent spermicidal efficacy, Koromex Jelly possesses to a high degree those other qualities which are physiologically and aesthetically so important to patients . . . For these reasons you can prescribe Koromex Jelly with *confidence.*

ACCEPTED AMERICAN MEDICAL ASS'N.

Write for literature.

Holland-Rantos Co., Inc.

551 Fifth Avenue, New York 17, N. Y.

P. R. N.

The Jocular Jingles of C. G. F.

by

Charles G. Farnum M. D.
Peoria, Ill.

FLU

At first some shivers creeping through my frame
And then within my head a pounding ache,
With chills and sweats and fever all aflame
My every bone within me tried to break.
My throat was parched and all my muscles sore.
Each sinus throbbed in ecstacy of pain,
I lay depleted to the very core
Nor could I cerebrate with foggy brain.
A constant coughing racked me day and night,
No sleep nor rest but added to my grief,
All strength oozed out and in my sorry plight
I looked to dissolution for relief.
In such a mess I'm haunted by the fear
That I shall do it all again next year.

CONTRAST

When I lie in a hospital bed,
Where everything's snowy white,
I crave some contrast
To hasten hours past;
Something that's cheery and bright.

So give me pajamas with color,
Colors that sizzle and blaze;
I want them so bright
One sees them at night;
Colors that dazzle and daze.

I want them gay, giddy and gaudy,
They must be woozy and wild;
I want them to surge
With the cosmic urge
And glare of the sun seem mild.

Give me baby-blue for a background,
Or orange, purple or red,
With green polka-dots
And heliotrope spots,
Or flamingo stripes instead.

Burnt orange, indigo, burgundy,
Scarlet or blue for the sleeves,
With lavender blotch
And big yellow splotch
Or red-brown of autumn leaves.

I want my pajamas so noisy,
They yell, they shriek and they cheer,
So everyone votes
Them good antidotes
For hospital atmosphere.

THE MODERN DRUG STORE

Ice cream cones and chicken salad,
Fountain service, chocolate bars,
Toilet soap and shaving brushes,
Facial creams in gaudy jars.

Pencils, pens and writing paper,
Cigarettes, cigars and snuff,
Coffee hot and sandwich toasted,
Perfume, lip stick, powder puff.

Kodak films and food for babies,
Papers, books and magazines,
Candy, light bulbs, party favors,
Mayonnaise on pork and beans.

Bathing caps and rubber slippers,
Clocks, thermometers and pipes,
Apple pie and salted almonds,
Tissue paper, plain or stripes.

Paint brush, stains and glass and putty,
Kitten, golf and tennis balls,
Chamois skins and deep sea sponges,
Toys for baby when he squalls.

Tooth brush, postal cards and talcum,
Drinking cup and paper plate,
Playing cards and food for doggie,
Birthday gifts collegiate.

Shaving soap and blades for razors,
Soda pop and ginger ale,
Arch supports and pocket lighters,
Road maps for the auto trail.

Hair dye, combs and incense burners,
Varnish, paint and turpentine,
Rubber gloves and water bottles,
Greeting cards and valentines.

Chewing gum or bowl of chilli,
Marbles, kites and games and toys,
Roach and fly exterminator,
Bats and gloves for baseball boys.

Slot machines and colored glasses,
Poison things for rats and bugs,
Powder, rouge and fine cosmetics —
AND they also have some drugs.

"FEEDING DIABETIC PATIENTS"

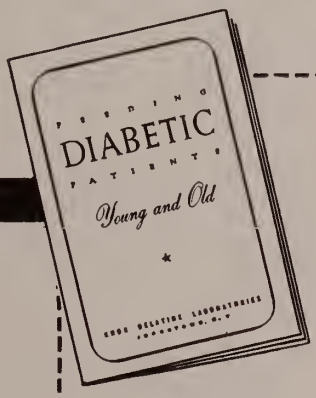
A practical booklet that helps your patients help themselves

The Knox booklet, *Feeding Diabetic Patients*, not only helps your patients help themselves, but also saves you time and trouble when you prescribe for such patients. It contains:

- A clear outline of principles of diabetic feeding, written in simple language for the layman.
- Practical tables of food composition.
- Sample diabetic menus.
- 33 pages of appealing recipes.
- Examples showing how Knox Gelatine (which is *all protein*, contains no sugar) helps to give variety and volume to menus, without breaking your dietetic rules for diabetic patients.

These helpful booklets are entirely free—a part of the Knox service to the medical profession. Clip the coupon below and send for as many copies as you can use.

FREE!



KNOX GELATINE

(U. S. P.)

PLAIN, UNFLAVORED GELATINE

...PURE PROTEIN

KNOX GELATINE
Johnstown, N. Y., Dept. 483

Please send me . . . . copies of the booklet, *Feeding Diabetic Patients—Young and Old*. I understand there is no obligation.

Name.....

Street.....

City.....State.....

Book Reviews

ANATOMY AS A BASIS FOR MEDICAL AND DENTAL PRACTICE. Donald Mainland, M.B., D.Sc., F.R.S.C., Professor of Anatomy, Dalhousie University, Halifax, N.S., Canada. Medical Student Series, Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, New York and London. Price $7.50.

This is one of the medical student series approved by the Association of American Medical Colleges. With the growth of medical knowledge and the increasing amount of material placed before the student body of our modern medical educational institutions, there has been a marked revision of many approved texts so that they are now intended primarily for students and written with that objective in view.

Previously many of these books were written for students and practitioners alike, and they contained many things which were not actually essential for the student alone. In this book the author has not only endeavored to keep the needs of medical students in mind, but has added much material of interest to the student.

Part one tells of the aims and methods featuring the importance of a careful study of anatomy by the medical student, and refers to the changing methods of the teaching of this important basic subject. Part two is on general anatomy discussing the body as a whole, then chapters on bones, joints, muscles and fasciae, blood vessels and lymphatic system, nerves and the skin and its appendages.

The third part, which comprises the major part of the book, is on regional anatomy, while in appendices, eight subjects of material interest to the student are presented in much detail. The book, as previously stated, is intended for the student and the usual non-essentials found in many texts on anatomy are eliminated in this compact volume. The book is so arranged that it will be of much value to the student and also for those desiring refresher work in this highly important subject, and it should be highly popular as a standard text for some time to come.

MITCHELL-NELSON TEXTBOOK OF PEDIATRICS: Edited by Waldo E. Nelson, M.D., Professor of Pediatrics, Temple University of Medicine. With the Collaboration of Forty-Nine Contributors. Fourth Edition, Revised. 1350 pages with 519 illustrations on 333 figures, 26 in color. Philadelphia and London: W. B. Saunders Company, 1945. Price $10.00.

This book has been completely revised and rewritten and bears little resemblance to the previous editions. It is, in fact, a new book, and as such stands as a fitting tribute to the late A. Graeme Mitchell to whom it is dedicated. The format is changed, the pages being larger, the text in two columns, the type larger, and the binding allows it to lie open at any page.

The material is well arranged and presented. Tables are frequently used for clarification and brevity. References to related pertinent material within the book itself, by page, are frequent, a rather new practice which adds greatly to the interest of the text. Each section is followed by a short list of references, all of them recent. One valuable new feature is an appendix containing various data and tables. Another feature is the addition of several sections which are devoted to an overall consideration of certain phases of the pediatric problem, e.g., language function, the adolescent, the care and evaluation of well children. There is an adequate index.

This book is recommended not only for pediatricians, but for general practitioners as well. The author's attempt to give enough of the "why" to make the "how" understandable, is indeed a stimulation to clinical thought.

J.C.McK.

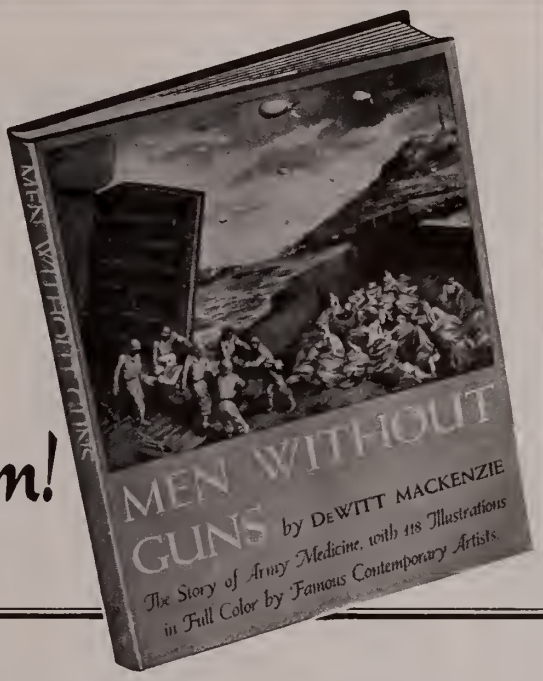
Books Received

The following books have been received for reviewing, and are herewith acknowledged. This listing should be considered as a sufficient return for the courtesy of the sender. Books that appear to be of unusual interest will be reviewed as space permits each month. Readers desiring additional information relative to books listed, may write the Editor who will gladly furnish same promptly.

ATLAS OF SURGICAL APPROACHES TO BONES AND JOINTS; By Toufick Nicola, M.D., F.A.C.S., Pro-

(*Continued on page* 68)

These Heroes Fought to SAVE Lives - not Destroy Them!



The Story of Army Doctors, Nurses, and Medical Corpsmen in the Foxholes and Hospitals of War

as portrayed in text and by

The Abbott Collection of War Paintings

in 118 Full-Color Plates

THIS new book records the great work of the Army Medical Corps in the war. In words and pictures it tells the story of the services of our doctors, nurses, and enlisted men on the battlefields of Europe and Asia. Packed with the dramatic tenseness and excitement of modern warfare, it is an authentic account of the men who fought without guns to save human life rather than destroy it.

DeWitt Mackenzie of the Associated Press, whose graphic recital of the story behind the pictures reproduced in this book will hold the reader's attention from first to last, covered the African, European, Burma, China and Pacific fronts, where he saw the Army Medical Corps in action. He has produced a contemporary record of extraordinary interest and permanent value.

A dozen American artists braved the hardships and perils of war to make the notable series of historical paintings, now the property of the United States Government, reproduced in MEN WITHOUT GUNS. Elsa Maxwell, of the *New York Post*, called them "some of the finest paintings that have come out of the war." Leading publications and art authorities have bestowed the same kind of praise. 118 of these paintings appear in this volume — in large size, full color plates — together with numerous black and white sketches. $5.00 at your bookseller's.

The Artists:

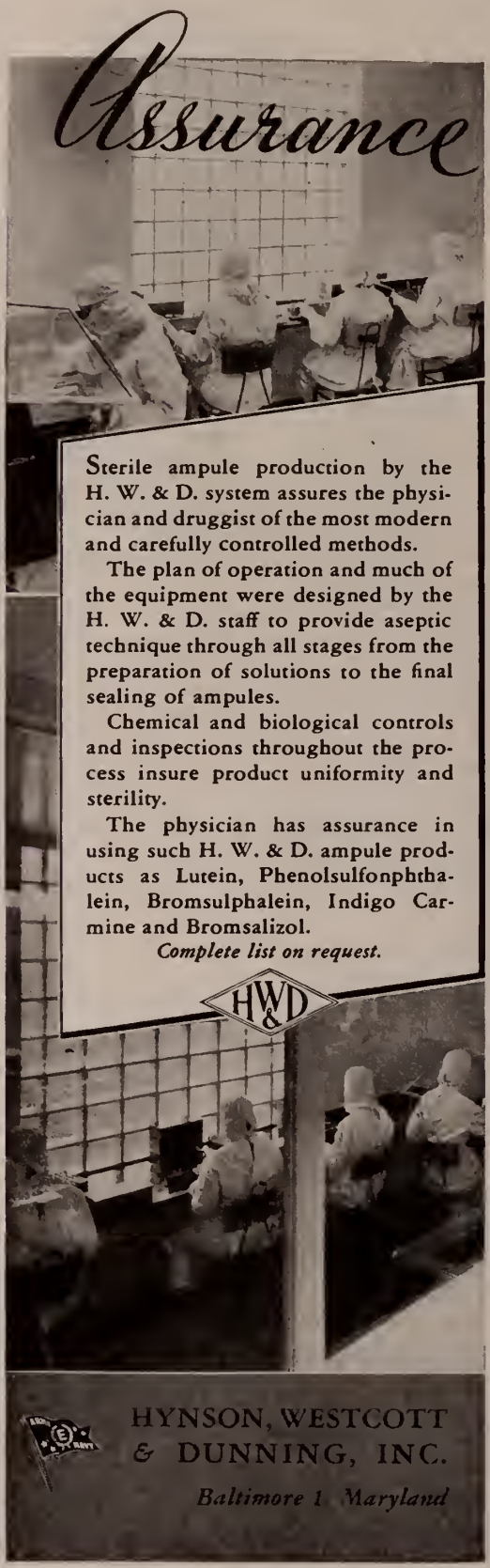
Howard Baer
Robert Benney
Peter Blume
Franklin Boggs
Francis Criss
John Steuart Curry
Ernest Fiene
Marion Greenwood
Joseph Hirsch
Fred Shane
Lawrence Beall Smith
Manuel Tolegian

MEN WITHOUT GUNS

By DeWitt Mackenzie

With an introduction by Major General Norman T. Kirk, Surgeon General of the United States Army

THE BLAKISTON COMPANY, Philadelphia 5, Pa.



BOOKS RECEIVED (Continued)

fessor of Orthopedics, New York Polyclinic Post Graduate School and Hospital; Diplomate of American Board of Orthopaedic Surgery; Member of American Orthopedic Association; Member of American Academy of Orthopaedic Surgery; formerly Chief of Clinic, Hospital for Ruptured and Crippled, New York. With a foreword by Norman T. Kirk, Major General, U. S. Army, The Surgeon General. The Macmillan Company, 1945. New York. Price $5.00

General and Plastic Surgery With Emphasis on War Injuries; by J. Eastman Sheehan, M.D., Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, New York and London, Price $6.75.

Manuel of Diagnosis and Management of Peripheral Nerve Injuries; By Robert A. Groff, M.D., Lt. Col., M.C., A.U.S.; Formerly Asst. Professor of Surgery, Jefferson Medical College, and Asst. Professor of Neurosurgery, Graduate School of Medicine, University of Pennsylvania; and Sara Jane Houtz, B.S., First Lieutenant (P.T.) A.U.S. With an Introduction by I. S. Ravdin, M.D., Brigadier General, M.C., A.U.S.: John Rhea Barton, Professor of Surgery, University of Pennsylvania. One Hundred Eleven Original Illustrations. J. B. Lippincott Company, Philadelphia and London. 1945. Price $8.00.

The Physician's Business; Practical and Economic Aspects of Medicine; By George D. Wolf, M.D., Assistant Clinical Professor of Otolaryngology, New York Medical College, New York; Fellow, New York Academy of Medicine; Fellow, American Medical Association, etc. Foreword by Harold Rypins, A.B., M.D., F.A.C.P. Second Edition. 58 Illustrations in the Text. J. B. Lippincott Company, Philadelphia and London. Price $6.00.

Trends of Mental Disease. American psychopathological Association. King's Crown Press. Morningside Heights, New York, 1945. Price $2.00.

War Neuroses; By Roy R. Grinker, M.D. and John P. Spiegel, M.D., formerly, Medical Corps, Army Air Forces; The Blakiston Company, Philadelphia and Toronto, 1945; Price $2.75.

Diseases of the Nose, Throat and Ear; Edited by Chevalier Jackson, M.D., Sc.D., LL.D., F.A.C.S., Honorary Professor of Broncho-Esophagology, Temple University, Philadelphia; and Chevalier L. Jackson, M.D., M.Sc., F.A.C.S., Professor of Broncho-Esophagology, Temple University, Philadelphia. With the Collaboration of 64 outstanding authorities. 844 pages with 934 illustrations on 581 figures including 18 plates in color. Philadelphia and London; W. B. Saunders Company, 1945. Price $10.00.

American Red Cross First Aid Textbook; Revised Edition; Prepared by the American Red Cross for the Instruction of First Aid Classes; 264 illustrations; The Blakiston Company, Philadelphia; 254 pages.

A LANDMARK IN ORAL ESTROGEN THERAPY



Derived from natural sources, highly potent and relatively free from side effects, ESTINYL (ethinyl estradiol) is a deeply rooted landmark in oral estrogen therapy. Its potency is so great that a single *0.05* mg. tablet taken once daily usually suffices for control of the average menopausal patient's symptoms. With ESTINYL, a general feeling of good health and of physical and mental fitness is attained. Its low cost makes it available to all patients.

ESTINYL Tablets are best administered at bedtime. Available in two strengths — *0.05* mg. (pink) and *0.02* mg. (buff) tablets. Bottles of 100, 250 and 1000 tablets.

TRADE-MARK ESTINYL—REG. U. S. PAT. OFF.

SCHERING

Schering CORPORATION · BLOOMFIELD, NEW JERSEY

IN CANADA, SCHERING CORPORATION LIMITED, MONTREAL

Medications of Choice FOR THE SPECIFIC INVOLVEMENT



Auralgan

in ACUTE OTITIS MEDIA

Symptoms

Pain, fever, edema, leucocytasis, sense of fullness and impaired hearing.

Treatment

Relief af pain and inflammatian—*Auralgan.*

Action

Decangestant, analgesic, bacteriastatic.



Otosmosan

in CHRONIC SUPPURATIVE OTITIS MEDIA

Symptoms

Persistent discharge, often faul smelling, usually no taxemia, na pain, no fever.

Treatment

Otosmasan.

Formula

Sulfathiazale carbamide 20% in glycerol (Daha).

Action

Deodorizes the discharge, liquifies unhealthy granulatians, bacteriostatic, permits normal epithelialization.

Scientific data and reprints of clinical studies reporting upon the use of Otosmosan available on request.

Complimentary quantities for clinical trial

THE DOHO CHEMICAL CORPORATION

New York 13, N. Y. • Montreal • London



terra firma



The management of hemorrhoids rests on solid therapeutic grounds when it achieves relief without resort to dangerous local narcotization or anesthetization. 'ANUSOL'* Hemorrhoidal Suppositories contain neither anesthetic nor narcotic agents and so do not mask the symptoms of more serious rectal pathology. Quick, safe relief is attained by the removal of inflammatory pressure on the nerve endings. Burning and itching are soothingly abated while demulcent protection guards against the complications of bleeding and infection.

Schering & Glatz, Inc., a subsidiary of

William R. **WARNER** *and Co. Inc.* 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'anusol'

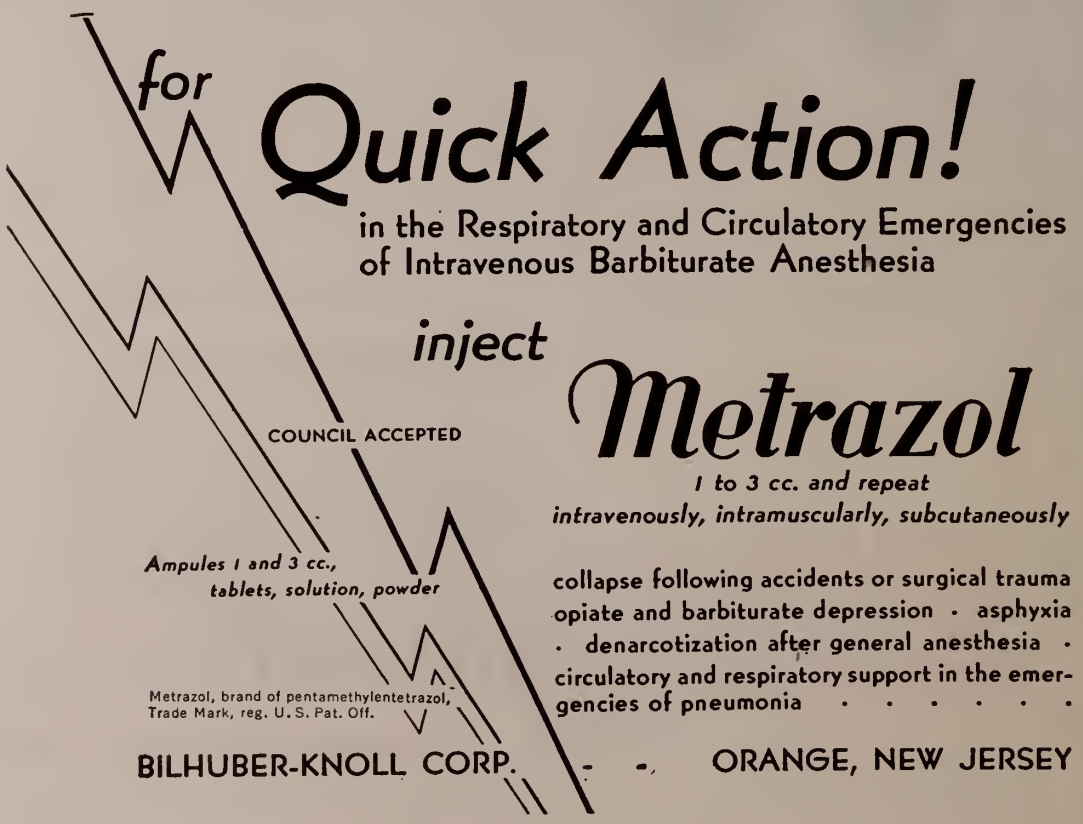
Boxes of 6 and 12 suppositories

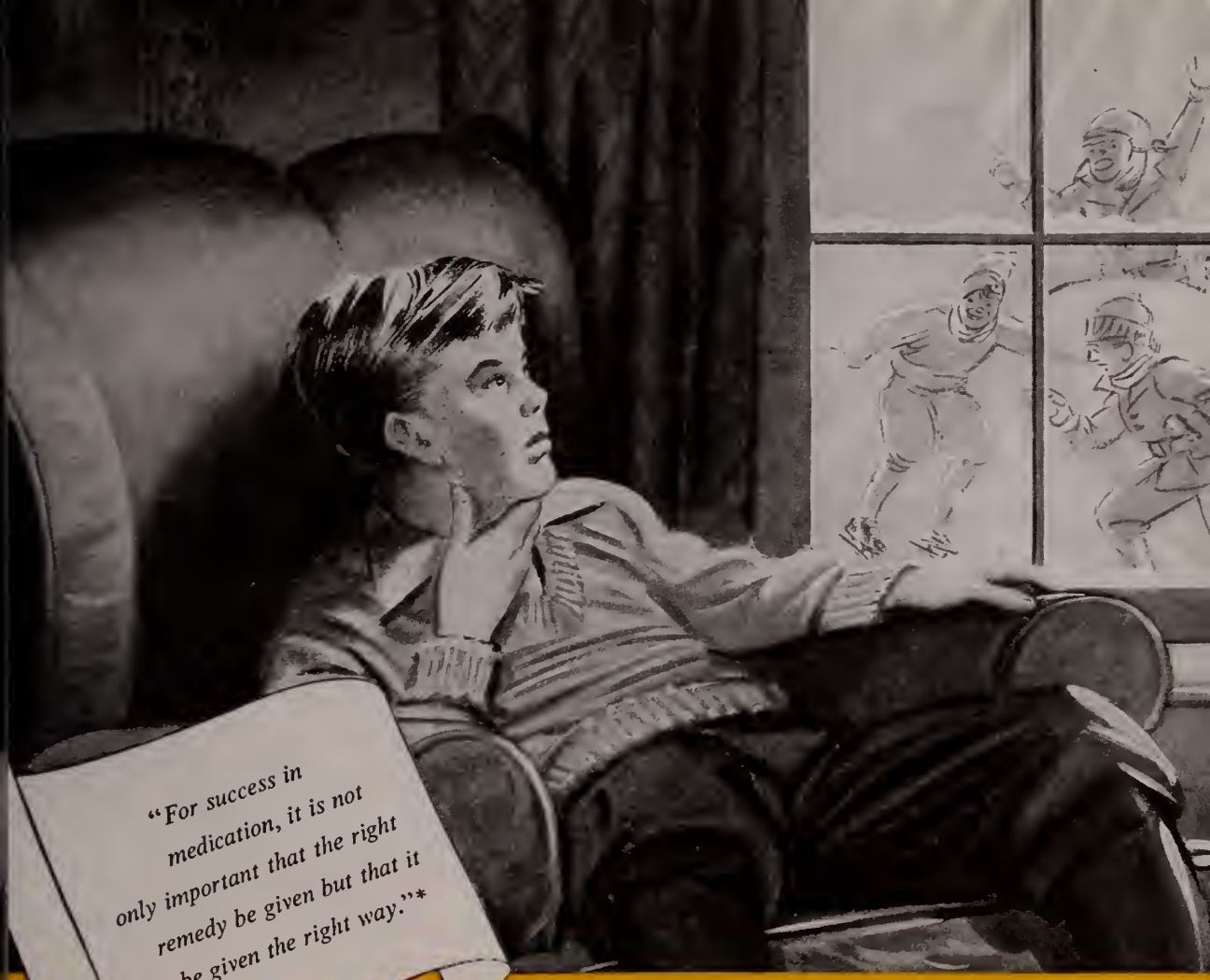
Hemorrhoidal Suppositories

*Trademark Reg. U. S. Pat. Off.

FIVE YEARS OF REHABILITATING ASTHMATIC CHILDREN

The National Home for Jewish Children at Denver has for the past five years been caring for underprivileged children suffering from acute bronchial asthma and other refractory upper respiratory diseases. The home is located in Denver and is available to children from all over the country whose families cannot afford extensive and costly private care. The children remain until physicians recommend that they be returned to their homes. In a comparatively normal environment, and sharing the companionship of other children, the asthmatic child is under expert medical supervision at the home and is cared for by a staff trained in child welfare. During his stay, periodic examinations are made and full reports given to the referring physicians and hospital clinics. The National Home has a modern, well equipped infirmary where children requiring bed care are attended by registered nurses under the supervision of the attending physicians. The children are housed in attractively furnished congregate-cottages with individual bedrooms. Food is carefully prepared in modern kitchens, and special diets are given when prescribed by physicians. The children participate in the community life by attending the local schools and taking part in communal recreations. In addition to the intensive preparation made prior to the child's admission to the home, an equally thorough after-care program is carried out on the return of the child to his family. The aim of the program is to make certain that the child will continue to enjoy his restored health in the very environment which originally was a factor contributing to the child's illness. Trained social workers educate the parents to the general health practices which play an important part in the treatment of allergic diseases. Application may be made by communicating with the Social Service Department of the National Home for Jewish Children at 1457 Broadway, New York 18, or through the office of the Jewish Social Service organization in any community.





Acceptable

EFFECTIVE LOCAL ANALGESIA

for the sore, irritated throat

In the management of sore, irritated throat in children, *effectiveness* in providing prolonged topical analgesia at the site of irritation, plus *ready acceptance*, are most advantageously joined in—

Dillard's Aspergum

Obviously resistance is negligible when children are given an agreeably flavored tablet of gum to chew.

When Aspergum is chewed, a copious flow of acetylsalicylic acid-laden saliva is brought into immediate and prolonged contact with all pharyngeal areas including those seldom reached, even intermittently, by sprays or irrigations.

The rhythmic stimulation of muscular action helps greatly to relieve local spasticity and stiffness.

Supplied in packages of 16; moisture-proof bottles of 36 and 250 tablets.

Ethically promoted—not advertised to the laity. White Laboratories, Inc., Pharmaceutical Manufacturers, Newark 7, N. J.

*Fantus, B.: The Technic of Medication, Chicago, American Medical Association, 1938, p. 5.

Formulac



for adequate infant nutrition

FORMULAC, newly introduced on the market, is the trade name for a fortified infant food which makes supplementary vitamin administration unnecessary.

FORMULAC (a reduced milk in liquid form) was developed by E. V. McCollum. It is sufficiently supplemented with vitamins and minerals to render it an adequate food for babies. Incorporation of the vitamins *into the milk itself* eliminates the risk of maternal error or carelessness.

FORMULAC presents a flexible basis for formula preparation. Supplemented by carbohydrates at your discretion, it may readily be adjusted to fit each individual child's needs.

FORMULAC has been tested clinically, and found satisfactory in promoting infant growth and development.

FORMULAC is inexpensive—within price range of even low income groups. It is on sale at most grocery and drug stores.



FORMULAC IS PROMOTED ETHICALLY

For professional samples and further information about this new infant food, mail a card to National Dairy Products Company, Inc., 230 Park Avenue, New York 17, N. Y.

NATIONAL DAIRY Sealtest PRODUCTS CORP.

ACCEPTED AMERICAN MEDICAL ASSN.

NATIONAL DAIRY PRODUCTS COMPANY, INC.
NEW YORK, N.Y.



a good supporting hand



in sulfonamide therapy is provided by 'ALKA-ZANE'* Alkaline Effervescent Compound. Administered in water, 'ALKA-ZANE' Alkaline Effervescent Compound helps maintain the degree of urinary alkalinity and high fluid intake essential to solubility of sulfonamides and their acetyl derivatives . . . for the prevention of crystalluria and obstruction of the kidneys and urinary tract.

'ALKA-ZANE' Alkaline Effervescent Compound makes a refreshing, effervescent drink which supplies the principal bases of the alkaline reserve, sodium, calcium and magnesium, as readily assimilable carbonates, citrates, and phosphates.

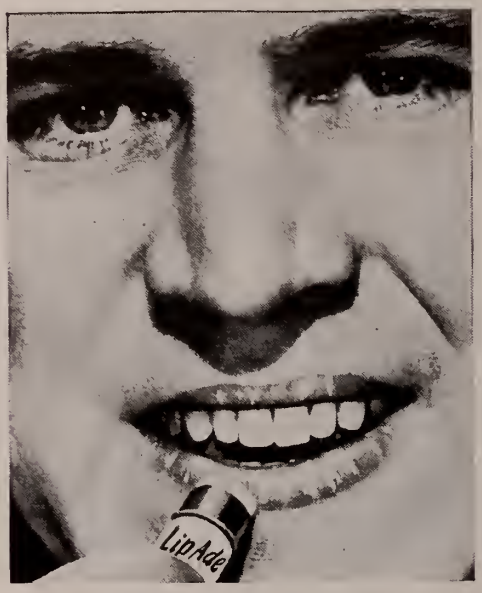
For additional pharmaceutical details consult your pharmacist—for more extensive medical data write Medical Division of William R. Warner & Co.

William R. WARNER and Co. Inc. 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'alka-zane'

Alkaline Effervescent Compound
Bottles of 1½, 4 and 8 ounces.

*Trademark Reg. U. S. Pat. Off.



QUICK RELIEF FOR

SORE CHAPPED LIPS



Mitigates discomfort of lips parched by fever or exposure. Contains intimate mixture of mineral oils and waxes — is non-irritating, protective, hypo-allergenic.

For over 80 years the original

LIP POMADE

LipAde

Copr., 1945, R&G

For Doctor's Personol Use

ROGER & GALLET L

500 Fifth Ave., New York 18, N.Y.

Gentlemen:

Pleose send me without obligotion your Roger & Gollet Lip Ade, in the handy, pocket-size, *metal* tube.

DR._____

ADDRESS_____

CITY STATE

JOURNAL ASSAILS PROPOSAL TO CHANGE TRADE NAMES OF DRUGS

Several pharmaceutical manufacturers in the United States are planning to market antibiotic preparations, such as penicillin and tyrothricin, under special trade names, and the October 20 issue of *The Journal of the American Medical Association* warns editorially that the move would only tend to confuse identity of the drugs.

"These agents are among the most active and useful compounds that have ever been developed," the editorial said, adding: "Some of their usefulness will be lost by confusing their identity.

"The phenomenal success of sulfonamide therapy in the United States has been partly due to willingness to make these compounds available under nonproprietary names. When a physician prescribes sulfanilamide, sulfathiazole, sulfadiazine or any other sulfonamide he knows exactly what he is prescribing. Such was not and is not now the case in other countries, where the sulfonamides have been offered under a multiplicity of names. What can manufacturers really gain by abandoning the prestige and publicity that have been given to penicillin and attempting in lieu thereof to establish new names which mean nothing to the medical profession? If their preparations are misused and if antibiotic therapy does not make the progress for which there is promise, these manufacturers must share the blame. The medical profession may well resent these attempts to muddy the clear waters of scientific advancement to conceal a desire for unwarranted individual profits."

The results of mass X-ray surveys in discovering unsuspected tuberculosis in apparently healthy persons lead one to the logical assumption that just as much, and probably more, tuberculosis might be found through routine roentgenological examination of patients admitted to our general hospitals and clinics. The Mayo Clinic has had such a program for a number of years. At the University of Chicago Hospital and Clinics where this procedure has been followed since 1939, 1.43 per cent of those examined have shown clinically significant tuberculosis. In addition, a large number of nontuberculous chest conditions were found. The most important among these were malignant neoplasms and cardiovascular disease. The over-all percentage of pathological findings was 21.2 per cent. Karl H. Pfuetze, M.D., Med. Dir. & Supt., Mineral Springs San., Cannon Falls, Minn.



When Weight Gains

ARE NEEDED

For the underweight patient just recovered from severe acute or chronic illness, increase in weight may be difficult to achieve with the customary high-caloric diet. Yet restoration of normal fat deposits and correction of nutritional deficiencies are essential for rapid return of strength and resistance to infection.

The intake of essential nutrients high in calorific value is expeditiously accomplished by including Ovaltine in the diet. This tasty food drink, made with milk as directed, is enjoyed by all patients both as a mealtime beverage and between meals. Not only rich in calories, it also provides generously other nutrients urgently required: biologically adequate proteins, highly emulsified fat, B complex and other vitamins, as well as the essential minerals iron, copper, calcium, and phosphorus. The low curd tension of Ovaltine favors quicker gastric emptying, hence the appetite actually tends to become enhanced through this desirable behavior.

THE WANDER COMPANY, 360 N. MICHIGAN AVE., CHICAGO 1, ILL.



Ovaltine

Three daily servings of Ovaltine, each made of ½ oz. Ovaltine and 8 oz. of whole milk,* provide:

PROTEIN	31.2 Gm.	VITAMIN A	2953 I.U.
CARBOHYDRATE	62.43 Gm.	VITAMIN D	480 I.U.
FAT	29.34 Gm.	THIAMINE	1.296 mg.
CALCIUM	1.104 Gm.	RIBOFLAVIN	1.278 mg.
PHOSPHORUS	.903 Gm.	NIACIN	7.0 mg.
IRON	11.94 mg.	COPPER	.5 mg.

*Based on average reparted values for milk.

PENICILLIN MAY HOLD SEVEN DAY CURE FOR SCARLET FEVER

Report Reveals Drug Treatment Effective In Rapidly Eliminating Germ From Nose And Throat

The successful seven day treatment of scarlet fever patients, by the injection of 10,000 units of penicillin into the muscles every three hours, is reported in *The Journal of the American Medical Association* of November 17. The report reveals that this treatment is effective in rapidly eliminating hemolytic streptococci from the nose and throat within 48 hours.

Manson Meads, M.D., M. Eugene Flipse Jr., M.D., Mildred W. Barnes and Maxwell Finland, M.D., with the collaboration of Ruth Drew and Alice Northrop, Boston, studied four groups of nine patients each who were admitted to the South Department of the Boston City Hospital between January and May 1945 with scarlet fever. Each group was treated differently: Group A without sulfonamides or antibiotics, B with penicillin injections into the muscles, C with sulfadiazine taken by mouth and D by spraying the nose and throat with penicillin solution.

Summarizing the results with each group, the authors write: "In patients with scarlet fever treated with penicillin intramuscularly, hemolytic streptococci disappear from the nasal and pharyngeal cultures within 48 hours, and if the treatment is continued for seven days the original types of streptococci do not reappear.

"Penicillin solution given to similar patients by spraying the nose and throat four to six times a day has very little effect on the hemolytic streptococci in the pharynx but seems to keep the nose free from these organisms while the treatment is being continued.

"In similar cases sulfadiazine given orally in full doses for seven days results in a suppression in the numbers of hemolytic streptococci in cultures obtained during the period of treatment only."

Scarlet fever is caused by the streptococcus germ which produces a soluble toxin or poison, which when absorbed into the body is believed to cause the rash of scarlet fever. It usually takes from one to two days from the time of infection to the manifestation of the disease. The disease commences with the symptoms of a severe tonsillitis, but in a day or two a multitude of minute red spots appear on the skin and also on the tongue, tonsils and throat. In mild cases the temperature begins to dop in five to seven days and the skin rash fades. The skin of the hands and feet peels off in sheets and shreds, that of the body in scales. Scarlet fever is communicated by contact.

The authors further state that the "clinical results also suggest that penicillin given intramuscularly during and for several days after the eruptive stage may minimize or even eliminate the late septic complications . . . . Furthermore, should these findings be corroborated on a large scale, the present requirement of isolation for scarlet fever patients for three or

(*Continued on page* 80)

Nutrition in Disease

Disease entities can be treated with greater efficiency when the complicating factor of nutritional failure is corrected.

B-NUTRON SYRUP — *Bottles 4-8-16 oz.*

B-NUTRON CAPULES — *Bottles 40-100 Capules*

B Complex and Iron Dual Dosage Forms

Each teaspoonful of B-Nutron Syrup (5 cc.) provides:

Thiamine Chloride (B_1)	2 mg.	Niacinamide	10 mg.
Riboflavin (B_2)	0.5 mg.	Ferrous Gluconate	1 gr.
Pyridoxine (B_6)	0.2 mg.	Manganese Sod. Cit. N.F. VII	¼ gr.

B-Nutron Capules provide essentially the same formula for use when this form is more acceptable to the patient than a syrup.

Indications

Chronic Diseases ★ Pre and Post Operative Care ★ Pregnancy and Lactation ★ Infancy and Childhood ★ Convalescence and Restricted Diet

NION CORPORATION NION **LOS ANGELES 38, CALIF.**

Your Advertisers

This is an index of those who serve the Medical Profession and support your journal. All advertisers are approved by your Journal Committee. It will help you to mention your Journal when writing them.

BODY SUPPORTS

The Spencer Corset Co., Inc., New Haven, Conn. .....
J. E. Hanger, Inc., Chicago 5 83

CLASSIFIED

Classified Advertisements 84

FOODS

American Meat Institute, Chicago, Ill. 52
Borden Company, 350 Madison Ave., New York 38
Coca Cola, Atlanta Ga. .....
Knox Gelatin Laboratories, Johnstown, N. Y. 65
Mead Johnson & Co., Evansville, Ind. .. Inside Back Cover
National Confectioner's Ass'n., Chicago 2, Ill. 48
National Dairy Products, New York, N. Y. 74
Nestle's Milk Products, Inc. .....
Quaker Oats, Chicago, Ill. 59
Wander Company, 360 N. Michigan Ave., Chicago 77

FINANCIAL AND INSURANCE

Crane Discount Corp., New York, N. Y. 82
Medical Protective Co., Fort Wayne, Ind. 3
Physicians Casualty Co., Omaha, Neb. 80

PHARMACEUTICALS

Ames Co., Inc., Elkhart, Ind. .....
ArEx Cosmetics, Chicago 84
Ayerst McKenna & Harrison, Ltd., New York 16 7
Bilhuber-Knoll Corp., Orange, N. J. 72
Bristol Laboratories, Inc., Syracuse, N. Y. .....
Bristol-Myers Co., New York 57
Burroughs Wellcome & Co., New York 17, N. Y. 19, 55
Ciba Company, Summit, N. J. 13
Crookes Laboratories, Inc., 305 E. 45th St., N. Y. 17, N. Y. 53
Doho Chemical Co., New York 70
Otis E. Glidden & Co., Evanston 62
Gold Pharmacal Co., New York 83
Harrower Laboratory, Chicago 1, Ill. 49
Hoffman-LaRoche, Inc., Nutley, N. J. 25
Holland-Rantos Co., Inc., 551 Fifth Ave., New York 63
Hynson, Westcott & Dunning, Charles and Chase Sts., Baltimore 68
International Vitamin Corp. .....
Irwin, Neisler & Co., Decatur, Ill. 24
Lanteen Medical Laboratories, Chicago 10 31
Thos. Leeming Co., 155 E. 44th St., N. Y. 17, N. Y. 8
Lilly, Eli & Co., Indianapolis, Ind. 42, 43, 44
Maltbie Chemical Co., Newark, N. J. 12
S. E. Massengill Co., Bristol, Tenn. 34
McNeil Laboratories, Inc., Philadelphia, Pa. 35
Merck & Co., Rahway, N. J. 56
Morris, Phillip & Co., 119 Fifth Ave., New York 37
National Oil Products Co. .....
Nion Corporation, Los Angeles, Calif. 78
Num Specialty Co., Pittsburgh, Pa. 82
Parke, Davis & Co., Detroit, Mich. 26
Pitman-Moore Co., Indianapolis 6, Ind. 14
Rare Chemicals, Inc., Flemington, N. J. 51
Rees-Davis Drugs, Inc., Meriden, Conn. 32
Reynolds & Co., R. J., Winston-Salem 28, 29
Riedel-de Haen, Inc., New York City 61
A. H. Robins, Richmond 19, Va. 46
Roche-Organon, Inc., Nutley, N. J. 47
J. B. Roerig & Co., 536 Lake Shore Drive, Chicago .. 16, 17
Roger & Gallet, 500 Fifth Ave., New York 18, N. Y. .. 76
Schenley Laboratories, Inc. 33
Schering Corporation, Bloomfield, N. J. 15, 69
Julius Schmid, Inc., 423 W. 55th St., New York City 36
G. D. Searle & Co., P. O. Box 5100, Chicago ..... Inside Front Cover
Sharp & Dohme, 111 N. Canal St., Chicago 60
Smith, Kline & French 20, 21, 39
E. R. Squibb & Sons, New York 22
Frederick Stearns & Sons, Detroit 5
United Rexall Drug Co. 58
Upjohn Co., Kalamazoo, Mich. 27
U. S. Vitamin Corp., 250 E. 43rd St., New York 17, N. Y. 50
Walker Vitamin Products, Inc., Mount Vernon, New York .....
Wm. R. Warner & Co., 113 W. 18th St., New York 9, 71, 75
Warren-Teed Products Co., Columbus 8, Ohio 40
Winthrop Chemical Co., 70 Varick St., New York 30
White Laboratories, Inc., Newark, N. J. 4, 5, 10, 11, 18, 73
Whittaker Laboratories, Inc., New York City 41
Wyeth, Inc., Philadelphia 23, 45
Zemmer Co., Pittsburgh, Pa. 84

PUBLISHERS

Blakiston Co., Philadelphia 5, Pa. 67

SANATORIA AND SANITARIA

Costeff Sanitarium, Peoria, Ill. 82
Edward Sanatorium, Naperville, Ill. 80
Kenilworth Sanitarium, Kenilworth, Ill. 81
Michell Sanatorium, Peoria, Ill. 81
Milwaukee Sanitarium, Wauwatosa, Wis. ..... Back Cover
Norbury Sanatorium, Jacksonville, Ill. 80
North Shore Health Resort, Winnetka 83
Mary E. Pogue School, Wheaton, Ill. 82
Stokes Sanitarium, Louisville, Ky. 84
Weirick's Sanitarium, Elgin, Ill. 84

SURGICAL SUPPLIES

General Electric X-Ray Corp., 2012 Jackson Blvd., Chicago 54

RADIUM

Central X-Ray & Clinical Laboratory, 58 E. Washington St., Chicago, Ill. 83
Physicians Radium Assn., 55 E. Washington St., Chicago 81

The NORBURY SANATORIUM

JACKSONVILLE, ILLINOIS — INCORPORATED and LICENSED

For the Treatment of Nervous and Mental Disorders

DR. ALBERT H. DOLLEAR, Superintendent
DR. FRANK GARM NORBURY, Medical Director
DR. SAMUEL N. CLARK, Physician
DR. HENRY A. DOLLEAR, Associate Physician
DR. FREDERICK A. CAUSEY, Associate Physician in Residence

Address Communications — THE NORBURY SANATORIUM, Jacksonville, Illinois

ACCIDENT - HOSPITAL - SICKNESS

INSURANCE

FOR PHYSICIANS, SURGEONS, DENTISTS EXCLUSIVELY

ALL PREMIUMS COME FROM — PHYSICIANS SURGEONS DENTISTS — ALL CLAIMS GO TO

$5,000.00 accidental death $25 weekly indemnity, accident and sickness	**$8.00** Quarterly
$10,000.00 accidental death $50 weekly indemnity, accident and sickness	**$16.00** Quarterly
$15,000.00 accidental death $75 weekly indemnity, accident and sickness	**$24.00** Quarterly

ALSO HOSPITAL EXPENSE FOR MEMBERS, WIVES AND CHILDREN

86c out of each $1.00 gross income used for members' benefit

$2,800,000.00 INVESTED ASSETS — **$13,000,000.00 PAID FOR CLAIMS**

$200,000.00 deposited with State of Nebraska for protection of our members.

Disability need not be incurred in line of duty—benefits from the beginning day of disability

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION

43 years under the same management
400 First National Bank Building — OMAHA 2, NEBRASKA

SCARLET FEVER (Continued)

four weeks would become unnecessary, and patients could be discharged after eight or 10 days without danger of giving rise to secondary cases or of cases returning with complications."

The authors emphasize that "these conclusions are based on a very small number of cases and therefore are only tentative. They require corroboration and elaboration in a larger number of cases of various kinds of hemolytic streptococcic infections."

The authors state "further developments in penicillin therapy may simplify the administration of such a program. Thus the use of penicillin X may result in the reduction in the frequency with which the doses are to be given. It may also be possible to give some of the treatment orally or in lozenges."

PENICILLIN SHORTAGE EXPLAINED

The shortage of penicillin for injection, which is causing resentment among physicians unable to secure this product for serious cases of disease, is due to "strikes, difficulty in maintaining production because of contamination during fermentation, increased export, the use of poor quality corn steep liquor and the manufacture of penicillin mixtures," according to the November 24 issue of *The Journal of the American Medical Association.*

The editorial stated that "steps are being

Edward Sanatorium

NAPERVILLE, ILLINOIS
(30 miles west of Chicago)
Est. 1907 by Dr. Theodore B. Sachs

FOR THE TREATMENT OF TUBERCULOSIS

MEDICAL STAFF

Jerome R. Head, M.D.—Medical Director
Frank Seligson, M.D.—Medical Superintendent

Ideally situated — beautiful landscaped surroundings — modern buildings and equipment
A-A rating by Illinois Department of Health

For detailed information apply to—

Chicago Office of Edward Sanatorium — 343 S. Dearborn St., Chicago, Wabash 8111

Kenilworth Sanitarium

Resident Staff
EDWARD J. KELLEHER, M. D.
Director
RICHARD D. HUFF, M. D.
Associate

Consultant Staff
THOMAS L. FENTRESS, M. D.
HARRY R. HOFFMAN, M. D.
SAMUEL H. KRAINES, M. D.
WILLIAM J. NOLAN, M. D.

A PRIVATE SANITARIUM FOR THE CARE AND TREATMENT OF MENTAL AND NERVOUS ILLNESSES, ALCOHOLISM AND DRUG ADDICTIONS

2228 BEECHWOOD AVE., WILMETTE, ILL.

Mailing address:
P. O. Box 600
Kenilworth, Ill.

Telephones
Wilmette 351
Wilmette 1662

taken to overcome the penicillin shortage. Export controls have been suggested to permit records of the quantity of penicillin leaving the United States, Directives giving hospitals first call on penicillin production have also been proposed. A higher grade of corn steep liquor is being sought."

The editorial suggested that a "step which should be undertaken by the manufacturers until the present shortage is alleviated is the discontinuance of doubtfully acting mixtures. Penicillin for injection purposes is truly a life-saving measure and its distribution should be given priority over the manufacture and distribution of over-the-counter items of less value."

Attention should be called to the necessity of taking a chest roentgenogram of every patient with tuberculosis of the cervical lymph nodes. This should be done routinely, even in the absence of pulmonary symptoms. The chest examination should be repeated at least twice a year and sooner, if indicated. It is not unusual for active pulmonary tuberculosis to appear one or two years after the development of tuberculosis in the cervical lymph nodes. Sumner S. Cohen, M.D., Journal-Lancet, April, 1945.

Radium Rental Service

By

THE PHYSICIANS RADIUM ASSOCIATION

Organized for the purpose of making radium available to physicians to be used in the treatment of their patients. Radium loaned to physicians at moderate rental fees, or patients may be referred to us for treatment if preferred.

•

The Physicians Radium Association

Room 1307—55 East Washington St.,
Pittsfield Bldg., CHICAGO 2, ILL.

Telephones: Central 2268-2269

Wm. L. Brown, M.D., Director

NERVOUS and MENTAL DISEASES

FOR MILD CASES *FOR SEVERE CASES*

MICHELL FARM — MICHELL SANATORIUM

Licensed by State of Illinois

George W. Michell, M.D., Medical Director

INFORMATION ON REQUEST

106 North Glen Oak Ave., Ph. 3-5179, Peoria, Ill.

Chicago Office:
46 East Ohio Street . . . Phone Delaware 6770



Social & Educational Adjustment

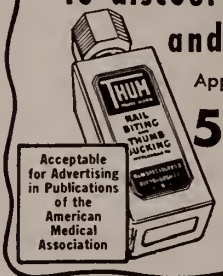
for exceptional children of all ages. Visit the school noted for its work in educational development and fitting such children for more normal living. Beautiful grounds. Home atmosphere. Separate buildings for boys and girls. Get catalogue.

The MARY E. POGUE SCHOOL

112 GENEVA ROAD WHEATON, ILL.
(NEAR CHICAGO)

RECOMMEND THUM

to discourage thumb-sucking and nail biting



Apply like nail polish

50¢ at all drug-stores $1.00

Acceptable for Advertising in Publications of the American Medical Association

THUM contains extract of capsicum (2.34%) in a base of acetone nail lacquer and isopropyl alcohol.

TIME-DOSE RELATIONSHIP IMPORTANT IN PENICILLIN TREATMENT

Penicillin, given in large doses over a relatively long period, is the only effective treatment of the once fatal disease known as subacute bacterial endocarditis, and inflammation of the lining membrane of the heart, according to an article in the December 22 issue of *The Journal of the American Medical Association.*

Arthur L. Bloomfield, M.D., and Richard M. Halpern, M.D., of the Department of Medicine, Stanford University School of Medicine, San Francisco, wrote that at the present time the best treatment seems to consist of four to eight intramuscular injections of penicillin every 24 hours, with a total daily dose of at least 200,000 units continued over a period of two months.

The doctors emphasized the importance of the time-dose relationship because otherwise the patient may lose the advantage gained by an early diagnosis. By the time a relapse occurs, due to inadequate dosage in the initial treatment, the infecting bacteria may develop increased resistance to penicillin.

Subacute bacterial endocarditis usually attacks valves of the heart that are already damaged. In several of the patients, heart failure occurred after the disease was under control. The authors explained that unless treatment is started early, irreversible damage to valves may occur even though penicillin eradicates the infection.

FIND RIGID CONTROL OF SALT INTAKE LOWERS HIGH BLOOD PRESSURE

Rigid control of salt intake has been found helpful in lowering high blood pressure, according to a report in the October 20 issue of the *Journal of the American Medical Association.*

Six investigators—Arthur Grollman, M.D., T. R. Harrison, M.D., M. F. Mason, Ph.D., James Baxter, M.D., Joseph Crampton, M.D., and Francis Reichsman, M.D., of Dallas, Texas—severely restricted the salt in the diet of six patients. The blood pressure in two was reduced to essentially normal levels, while in three

COSTEFF SANITARIUM

Mental and Nervous Disorders
Alcoholism and Drug Addiction

- **SHOCK TREATMENT** (Insulin, Metrazol Electro-shock) administered in suitable cases.
- **ARTIFICIAL FEVER THERAPY**
  Home like environment, individual attention. MODERATE RATES.

Licensed by the State of Illinois

HARRY COSTEFF, M. D., Medical Director
1109 NO. MADISON AVE., PEORIA, ILL.
Phone 4-0156 **Literature on request.**

POST WAR COLLECTIONS

Our Post War Plan is a friendly aid to patients in paying past due medical bills as they change from war pay to peace pay. Protect your fees by acting now. Write. Our local auditor will call and tell you all about it.

CRANE DISCOUNT CORPORATION

230 W. 41 St. **New York 18, N. Y.**



FULLY APPROVED BY THE
AMERICAN COLLEGE OF SURGEONS

NORTH SHORE HEALTH RESORT

WINNETKA, ILLINOIS

on the Shores of Lake Michigan

A completely equipped sanitarium for the care of
nervous and mental disorders, alcoholism and drug addiction
offering all forms of treatment, including electric shock

Samuel Liebman, M.S., M.D.
Medical Director

225 Sheridan Road Phone Winnetka 211

others there was a moderate reduction.

The authors, who are from the Department of Experimental Medicine of the Southwestern Medical College and the Medical Service of the Parkland Hospital, state that "the results thus far obtained would appear to indicate that in certain patients this form of therapy is decidedly beneficial."

Although experiments in controlling salt in the diet have been made at different times in France, Germany and the United States none have so far proved successful. The authors believe that they failed because of the employment of moderate, rather than drastic, restriction of salt in the diet. Moderate restriction, they state, usually fails to influence appreciably the blood pressure.

As yet, the effect of rigid salt control has not been studied during hot weather and the investigators believe that harmful effects may occur when sweating is excessive.

In conclusion the report says that "in view of the relative ease with which this method can be applied it seems to offer, for certain patients, the most practical and effective therapeutic measure now available."

Radium Rental
Prompt Service

Deep X-Ray & Radium Therapy

Central X-Ray & Clinical Laboratory

F. F. Schwartz, M.D., Director
58 E. Washington St., Dear. 6811
CHICAGO, ILL.

J. E. HANGER, inc.

1112 S. Michigan Ave. Chicago 5, Ill.
Phone Wab. 1135
1912 Olive St. St. Louis 3, Mo.
Phone CEntral 1088-1089

DURALUMIN AND ENGLISH WILLOW LIMBS
MECHANICAL ARMS
TRUSSES CANES CRUTCHES
INVALID CHAIRS

Illustrated Catalog Sent on Request

in whooping cough

ELIXIR BROMAURATE

IS A UNIQUE REMEDY OF UNIQUE MERIT

Cuts short the period of illness and relieves the distressing spasmodic cough. Also valuable in Bronchitis and Bronchial Asthma.

In four-ounce original bottles. A teaspoonful every 3 to 4 hours.

Prescribed by Thousands of Doctors

GOLD PHARMACAL CO. NEW YORK CITY

Lozenges
SULFATHIAZOLE 2½ GR.
ZEMMER

Sulfathiazole	2½gr.
Benzocaine	1/10gr.
Oil Wintergreen	q.s.

Chemists to the Medical Profession

THE ZEMMER COMPANY, OAKLAND STATION, PITTSBURGH 13, PA.



IL 1-46

MORPHINE AND OTHER DRUG ADDICTIONS
Selected patients who wish to make good and learn how to keep well; methods easy, regular, humane. Dr. Weirick's Sanitarium, Elgin, Ill.

THE STOKES SANITARIUM 923 Cherokee Road, Louisville, Kentucky

Our **ALCOHOLIC** treatment destroys the craving, restores the appetite and sleep, and rebuilds the physical and nervous condition of the patient. Liquors withdrawn gradually, no limit on the amount necessary to prevent or relieve delirium.

MENTAL patients have every comfort that their home affords.

The **DRUG** treatment is one of gradual Reduction. It relieves the constipation, restores the appetite and sleep; withdrawal pains are absent. No Hyoscine or rapid withdrawal methods used unless patient desires same.

NERVOUS patients are accepted by us for observation and diagnosis as well as treatment.

E. W. STOKES, Medical Director, Established 1904.
Telephone—Highland 2101

Classified Ads

RATES FOR CLASSIFIED ADVERTISEMENTS—For 30 words or less: 1 insertion, $3.00; 3 insertions, $8.00; 6 insertions, $14.00; 12 insertions, $24.00; from 30 to 50 words: 1 insertion, $4.00; 3 insertions, $10.50; 6 insertions, $20.00; 12 insertions, $30.00. Extra words: 1 insertion, 10c each; 3 insertions, 25c each; 6 insertions, 40c each; 12 insertions, 50c each. A fee of 25c is charged for those advertisers who have answers sent care of the Journal. Cash in advance must accompany copy.

FOR SALE: Complete x-ray equipment. 200,000 volt transformer, tubes, overhead tubing, fluoroscope, stereoscope, cassetts and screws, stereoscopic table, excellent tube stand. See and name your own price. W. F. Buckner, M.D., Watseka, Illinois.

FOR SALE—GENERAL ELECTRIC SNOOK X-RAY and fluoroscope, with 100 MA mechanically rectified generator and control; tilting table; Bucky, stereoscope, dark room and accessory equipment, screens, cassetts. Doctor retiring. Write Box 121, Illinois Medical Journal, 30 N. Michigan Avenue, Chicago 2, Illinois.

FOR SALE: Mueller Surgical Bone Engine. Complete with Halle pistol and hand piece, flexible shaft and sheath, foot switch and set of burrs. $100.00. Leo M. Morse, M.D., 25 E. Washington St., Chicago 2.

FOR SALE: Private practice. Un-opposed. Essential area Minnesota Catholic Community. Population 2000. Five room office. Fully equipped. Hospital facilities. Present doctor leaving on account of health. Write full particulars Box 122, Illinois Medical Journal, 30 N. Michigan, Chicago 2.

WANTED BY DENTAL CORPS MAJOR: Appointment with school, hospital, industrial clinic or other medical group. Full or part time basis. Graduate of Class A University. Wide experience in both civilian and military practice for past eight years. 4½ years with large Army hospital. Supervised work of 20 other dentists for over 2½ years. 35 years old. Illinois license. Able to invest modest sum and furnish equipment if necessary. Best references. Give full details in first letter. Write Box 120, Illinois Medical Journal, 30 N. Michigan, Chicago 2, Ill.

ESTABLISHED HOSPITAL FOR LEASE: A sanitarium for nervous, mental, alcoholic and drug cases, to a reputable physician or medical group. Doing an excellent business. Dr. E. W. Stokes, 923 Cherokee Road, Louisville 4, Kentucky.

INFECTIOUS COLON DISEASES SUCCUMB TO SULFATHIAZOLE DERIVATIVE

A new sulfathiazole derivative, phthalylsulfathiazole of sulfathalidine, has been found to be superior to other drugs in the treatment of infectious diseases of the colon, according to Michael R. Streicher, M.D. of Chicago.

Writing in the December 15 issue of *The Journal of the American Medical Association*, Dr. Streicher, who is Assistant Professor of Medicine at the University of Illinois College of Medicine, said that his experience led him to believe that this drug, taken by mouth, was less poisonous and more effective in arresting the growth of bacteria "than any intestinal agent used previously."

The author treated 100 patients with this drug, 80 of whom had chronic ulcerative colitis. The others were suffering from other infections of the colon. Dr. Streicher wrote that with sulfathalidine treatment of the 100 patients under study, 84 demonstrated good results, six showed fair results and 10 patients showed poor reactions to treatment.

Chronic ulcerative colitis is a disease marked by numerous ulcerations in the colon; it has a chronic course with periods of abatement of the symptoms and then periods in which the disease increases in severity. It usually affects young and middle-aged adults. The symptoms are abdominal cramps, fever, and weakness. As time goes on there is progressive emaciation, anemia and weakness and the blood pressure falls.

FREE SAMPLE

DR. _____
ADDRESS _____
CITY _____
STATE _____



ROUGH HANDS
FROM TOO MUCH SCRUBBING?
Soften dry skin with AR-EX CHAP CREAM! Contains carbonyl diamide, shown in hospital test to make skin softer, smoother, and even whiter! *Archives of Derm. and S., July, 1943.* FREE SAMPLE.

AR-EX CHAP CREAM

AR-EX COSMETICS, INC., 1036 W. VAN BUREN ST., CHICAGO 7, ILL.

SHOULD VITAMIN D BE GIVEN ONLY TO INFANTS?

VITAMIN D has been so successful in preventing rickets during infancy that there has been little emphasis on continuing its use after the second year.

But now a careful histologic study has been made which reveals a startlingly high incidence of rickets in children 2 to 14 years old. Follis, Jackson, Eliot, and Park* report that postmortem examination of 230 children of this age group showed the total prevalence of rickets to be 46.5%.

Rachitic changes were present as late as the fourteenth year, and the incidence was higher among children dying from acute disease than in those dying of chronic disease.

The authors conclude, "We doubt if slight degrees of rickets, such as we found in many of our children, interfere with health and development, but our studies as a whole afford reason to prolong administration of vitamin D to the age limit of our study, the fourteenth year, and especially indicate the necessity to suspect and to take the necessary measures to guard against rickets in sick children."

*R. H. Follis, D. Jackson, M. M. Eliot, and E. A. Park: Prevalence of rickets in children between two and fourteen years of age, Am. J. Dis. Child. 66:1-11, July 1943.

MEAD'S Oleum Percomorphum With Other Fish-Liver Oils and Viosterol is a potent source of vitamins A and D, which is well taken by older children because it can be given in small dosage or capsule form. This ease of administration favors continued year-round use, including periods of illness.

MEAD'S Oleum Percomorphum furnishes 60,000 vitamin A units and 8,500 vitamin D units per gram. Supplied in 10- and 50-cc. bottles and bottles of 50 and 250 capsules. Ethically marketed.

MEAD JOHNSON & COMPANY, Evansville 21, Ind., U.S.A.

N Y Acad of Med
5 Ave & 103rd St
New York N Y
Exch



COLONIAL HALL
One of the 14 Units in "Cottage Plan"

FOR NERVOUS DISORDERS

MAINTAINING the highest standards for more than a half century, the Milwaukee Sanitarium stands for all that is best in the care and treatment of nervous disorders. Photographs and particulars sent on request.

Josef A. Kindwall, M. D.
Carroll W. Osgood, M. D.
William T. Kradwell, M. D.
Merle Q. Howard, M. D.
Lewis Danziger, M. D.
Russell C. Morrison, M. D.
Arthur J. Patek, M. D.

G. H. Schroeder
Business Manager

MILWAUKEE SANITARIUM

WAUWATOSA—WISCONSIN

PHYSICIAN'S CHICAGO OFFICE—1117 Marshall Field Annex—Wednesdays, 1-3 P.M.—Central 1162

THE N.Y. ACADEMY OF MEDICINE
MAR 26 1946
LIBRARY

The ILLINOIS Medical Journal

VOL. 89 NO. 2

February, 1946

In This Issue

Hematology - A Round Table

Functional Nervous Disorders

---- and Others

(See page 39 for complete Table of Contents)

ANNUAL MEETING, ILLINOIS STATE MEDICAL SOCIETY
PALMER HOUSE, CHICAGO, MAY 14, 15, 16, 1946

OFFICIAL JOURNAL OF THE ILLINOIS STATE MEDICAL SOCIETY



in painful spasm . . .

Pavatrine with Phenobarbital provides both *neurotropic* and *musculotropic* spasmolysis—notably free from undesirable side effects—combined with mild central nervous sedation. Non-narcotic; orally administered.

INDICATIONS:

Gastrointestinal: cardiospasm, gastric hypermotility, pylorospasm, spasticity of duodenum, spastic states of colon

Dysmenorrhea: resulting from myometrial hypertonicity or excessive uterine contractions

Urinary Bladder: adjunctive therapy for relief of bladder spasm, whether due to a simple tenesmus, cystitis or mechanical trauma.

Pavatrine is the registered trademark of G. D. Searle & Co., Chicago 80, Illinois

PAVATRINE WITH PHENOBARBITAL

(β-diethylaminoethyl fluorene-9-carboxylate hydrochloride)

SEARLE *Research in the Service of Medicine*

Entered as Second-Class Matter July 21, 1919, at the Post Office, Oak Park, Illinois, under the Act of March 8, 1879. Acceptance for mailing at special rate of postage provided for in Section 1102,Act of October 8, 1917, authorized July 15, 1918. Office of Publications, 715 Lake Street, Oak Park, Ill.

The Doctor *needs* a Champion

to listen to his troubles, counsel with him as he does with his patients, defend him to the last ditch, defeat unwarranted attacks upon him and save him from loss and worry through malpractice suits.

The Doctor *has* a Champion

in Medical Protective, which since 1899 has engaged in Professional Protection Exclusively, defending in more than 60,000 malpractice attacks and saving doctors endless worry and millions in losses.

℞

Specialized Service

The Medical Protective Company

of

Fort Wayne, Indiana

Medications of Choice FOR THE SPECIFIC INVOLVEMENT



Auralgan

in ACUTE OTITIS MEDIA

Symptoms

Pain, fever, edema, leucocytosis, sense of fullness and impaired hearing.

Treatment

Relief of pain and inflammation—*Auralgan.*

Action

Decongestant, analgesic, bacteriostatic.



Otosmosan

in CHRONIC SUPPURATIVE OTITIS MEDIA

Symptoms

Persistent discharge, often foul smelling, usually no toxemia, no pain, no fever.

Treatment

Otosmosan.

Formula

Sulfathiazole carbamide 20% in glycerol (Doho).

Action

Deodorizes the discharge, liquifies unhealthy granulations, bacteriostatic, permits normal epithelialization.

Scientific data and reprints of clinical studies reporting upon the use of Otosmosan available on request.

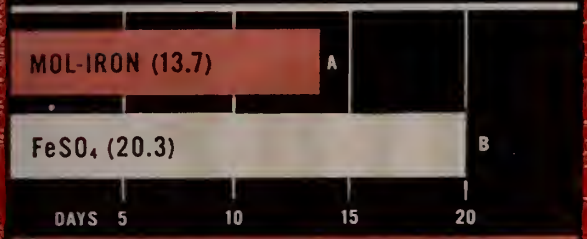
Complimentary quantities for clinical trial

THE DOHO CHEMICAL CORPORATION

New York 13, N. Y. • Montreal • London

A NEW AND DEFINITE ADVANCE IN TREATING IRON-DEFICIENCY ANEMIAS

Rapidity of Clinical Response



(A) Completely effective therapeutic response (return to normal blood values) was obtained in an average of 13.7 days of Mol-Iron therapy.

(B) Ferrous sulfate therapy *failed* to produce normal hemoglobin values after an average of 20.3 days.

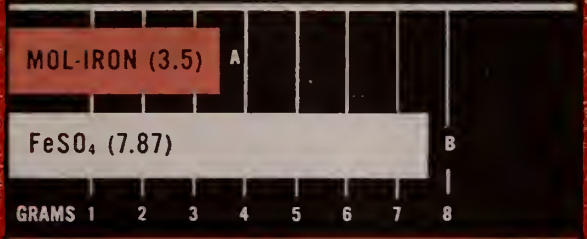
Average Daily Hemoglobin Increase



(A) The group treated with Mol-Iron averaged a daily hemoglobin increase of 2.48 per cent (0.36 Gm. per cent).

(B) The group treated with ferrous sulfate showed an average daily gain of hemoglobin of 0.83 per cent (0.12 Gm. per cent)—a response about one-third as effective.)

Therapeutic Intake of Bivalent Iron



(A) The Mol-Iron treated group received an average total of 3.528 Gms. of bivalent iron to produce the sought for result (return to normal blood values).

(B) While an average ingestion of 7.871 Gms. of bivalent iron failed to achieve an optimal response in the ferrous sulfate treated group.

The charts summarize the results of a controlled study of comparative therapeutic response in post-hemorrhagic and nutritional hypochromic anemias.

The series includes 49 cases treated with Mol-Iron and 21 with exsiccated ferrous sulfate; the results are typical of those observed in treatment of iron-deficiency anemias with White's Mol-Iron.

A specially processed, co-precipitated complex of molybdenum oxide (3 mg.) and ferrous sulfate (195 mg.).

White's MOL-IRON TABLETS

Available clinical evidence indicates that, in hypochromic anemia, the therapeutic response to this highly effective synergistic combination—as compared with equivalent dosage of ferrous sulfate alone—has unusual advantages:

1. NORMAL HEMOGLOBIN VALUES ARE RESTORED MORE RAPIDLY, INCREASES IN THE RATE OF HEMOGLOBIN FORMATION BEING AS GREAT AS 100% OR MORE IN PATIENTS STUDIED.
2. IRON UTILIZATION IS SIMILARLY MORE COMPLETE.
3. GASTRO-INTESTINAL TOLERANCE IS NOTABLY SATISFACTORY—even among patients who have previously shown marked gastro-intestinal reactions following oral administration of other iron preparations.

INDICATED IN:

Hypochromic (iron deficiency) anemias caused by inadequate dietary intake or impaired intestinal absorption of iron; excessive utilization of iron, as in pregnancy and lactation; chronic hemorrhage.

DOSAGE: One or two tablets three times daily after meals.

Available in bottles of 100 and 1000 tablets.

Ethically promoted—not advertised to the laity.

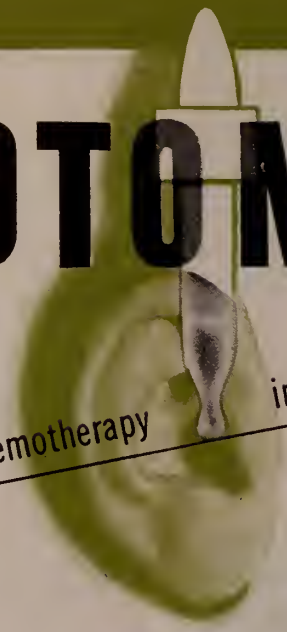
WHITE LABORATORIES, INC.

Pharmaceutical Manufacturers, Newark 7, New Jersey

New and unusually effective

White's OTOMIDE

for topical chemotherapy in acute and chronic ear infections



The unique clinical advantages of this stable, non-irritating solution of sulfanilamide, urea and chlorobutanol may be briefly summarized as follows:

POTENTIATED ANTIBACTERIAL ACTIVITY—urea-sulfanilamide mixture more effective than either drug used independently.[1] Not inhibited by pus and tissue debris.

BETTER TISSUE DIFFUSION—urea-sulfanilamide mixture diffuses more actively through living and dead tissues.[2]

TOLERANCE—freedom from alkalinity virtually obviates local chemical irritation.

ANALGESIA—effective chlorobutanol analgesia without impaired sulfonamide activity.

WIDE FIELD—effective in BOTH acute AND chronic otologic infections. Active against certain sulfonamide-resistant bacteria.[3]

FORMULA:

Sulfanilamide	5%
Carbamide (Urea)	10%
Chlorobutanol	3%
Glycerin (high sp. gr.)	q.s.

1. Tsuchiya, H. M. et al: Proc. Soc. Exp. Biol. and Med., *50*:262, 1942.
2. McClintock, L. A. and Goodale, R. H.: U. S. Naval Med. Bull., *41*:1057, 1943.
3. Strakosch, E. A. and Clark, W. G.: Minn. Med., *26*:276, 1943. Brown, C. et al: Am. J. Surg., to be published.

Available in dropper bottles of one-half fluid ounce (15cc.)
—on prescription only.

WHITE LABORATORIES, INC.
Pharmaceutical Manufacturers
NEWARK 7, N. J.

STRENGTH AND ENDURANCE



may be impaired in middle-aged men when male sex hormone diminishes and the climacteric begins. For such patients, therapy with ORETON supplies needed testosterone and alleviates promptly the diverse symptoms of the disturbed endocrine balance.

With ORETON, androgen-deficient patients "register their appreciation of a definite change in the muscular system"[1] and are quickly aware of "greater mental ability, not only in concentration, but in fulfilling of social and economic responsibilities."[2]

ORETON
ORETON-M

ORETON in oil for intramuscular injection in ampules of 1 cc. containing 5, 10 and 25 mg. testosterone propionate. Average male climacteric patients require 25 mg. ORETON injected three times weekly, decreasing dosage and increasing the interval with improvement.

ORETON-M Tablets containing 10 mg. methyl testosterone may be used initially for mild climacteric symptoms, average dosage consisting of three to six tablets daily. Dosage may be adjusted subsequently to need.

1. Kearns, W. M.: J. Clin. Endocrinol. 1:106, 1941.
2. Dunn, C. W.: Delaware State M. J. 11:76, 1939.

TRADE MARKS ORETON AND ORETON-M — REG. U. S. PAT. OFF.

SCHERING

Schering CORPORATION • BLOOMFIELD, N. J.

IN CANADA: SCHERING CORPORATION LIMITED, MONTREAL

Formulac

the new vitamin-fortified infant food

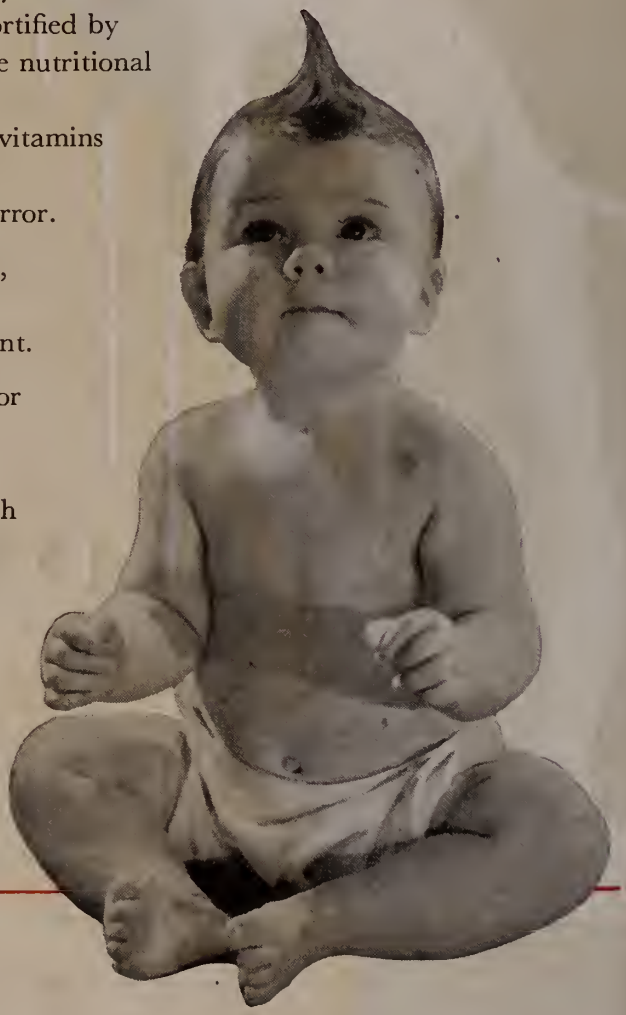
FORMULAC was developed by E. V. McCollum. It is a reduced milk, in liquid form, fortified by vitamins and minerals to meet the nutritional needs of infants *without supplementary administration*. Incorporation of vitamins into the milk itself eliminates the risk of human oversight or error.

FORMULAC has been tested clinically, and proved satisfactory in promoting infant growth and development.

FORMULAC presents a flexible basis for formula preparation. Supplemented by carbohydrates at your discretion, it may readily be adjusted to meet each child's individual nutritional needs.

FORMULAC is inexpensive. Priced within the range of even low income groups, it is on sale at most drug and grocery stores.

FORMULAC IS PROMOTED ETHICALLY





NATIONAL DAIRY Sealtest PRODUCTS CORP.

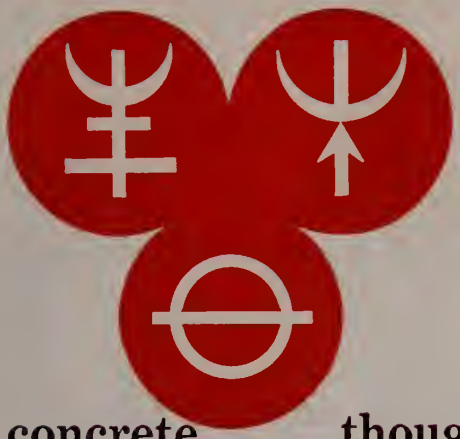
• For professional samples and further information about FORMULAC, mail a card to National Dairy Products Company, Inc., 230 Park Avenue, New York 17, N. Y.

ACCEPTED AMERICAN MEDICAL ASS'N Council on Foods and Nutrition

Distributed by KRAFT FOODS COMPANY

NATIONAL DAIRY PRODUCTS COMPANY, INC.

New York, N. Y.



concrete thoughts on concretions



There is impressive evidence that urinary concretions and renal blockage incidental to sulfonamide therapy may be avoided by:

1. Alkalization of the urine to provide as much as a *tenfold* increase in solubility of excreted sulfonamides in order to prevent crystalluria and consequent hematuria or anuria.
2. Maintenance of high urinary output through increased fluid intake.

Systemic alkalization as well as increased fluid intake may be accomplished simply and directly with 'ALKA-ZANE' Alkaline Effervescent Compound. A refreshing drink when administered in water, 'ALKA-ZANE' Alkaline Effervescent Compound assures both adequate diuresis *and* alkalization, thus eliminating the need to "force fluids".

For additional pharmaceutical details consult your pharmacist—for more extensive medical data write Medical Division.

William R. **WARNER** and Co. Inc. 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'alka-zane'

alkaline effervescent compound

supplies the important bases of the alkaline reserve—sodium, calcium and magnesium as readily assimilable carbonates, citrates and phosphates. Available in bottles of 1½, 4 and 8 ounces (granules).

*Trademark Reg. U.S. Pat. Off.



Styled for Individual Tastes

Neo-Synephrine for intranasal use is "styled" in three distinct forms too. All three provide the same real breathing comfort . . . prompt decongestion that endures for hours. Only the vehicles are different . . . isotonic saline, unflavored; Ringer's Solution, pleasantly aromatic; jelly in applicator tubes for convenience.

Neo-Synephrine

HYDROCHLORIDE

LAEVO-d-HYDROXY-β-METHYLAMINO-1-HYDROXY-ETHYLBENZENE HYDROCHLORIDE

For Nasal Decongestion

THERAPEUTIC APPRAISAL: Quick acting, long lasting . . . nasal decongestion without compensatory recongestion; relatively free from cardiac and central nervous system stimulation; consistently effective upon repeated use; no appreciable interference with ciliary activity; isotonic to avoid irritation.

INDICATED for symptomatic relief in common cold, sinusitis, and nasal manifestations of allergy.



ADMINISTRATION may be by dropper, spray or tampon, using the ¼% in saline or in Ringer's solution in most cases—the 1% in saline when a stronger solution is indicated. The ½% jelly in tubes is convenient for patients to carry.

SUPPLIED as ¼% and 1% in isotonic salt solution, and as ¼% in isotonic solution of three chlorides (Ringer's), bottles of 1 fl. oz.; ½% jelly in ⅜ oz. collapsible tubes with applicator.

Samples Upon Request

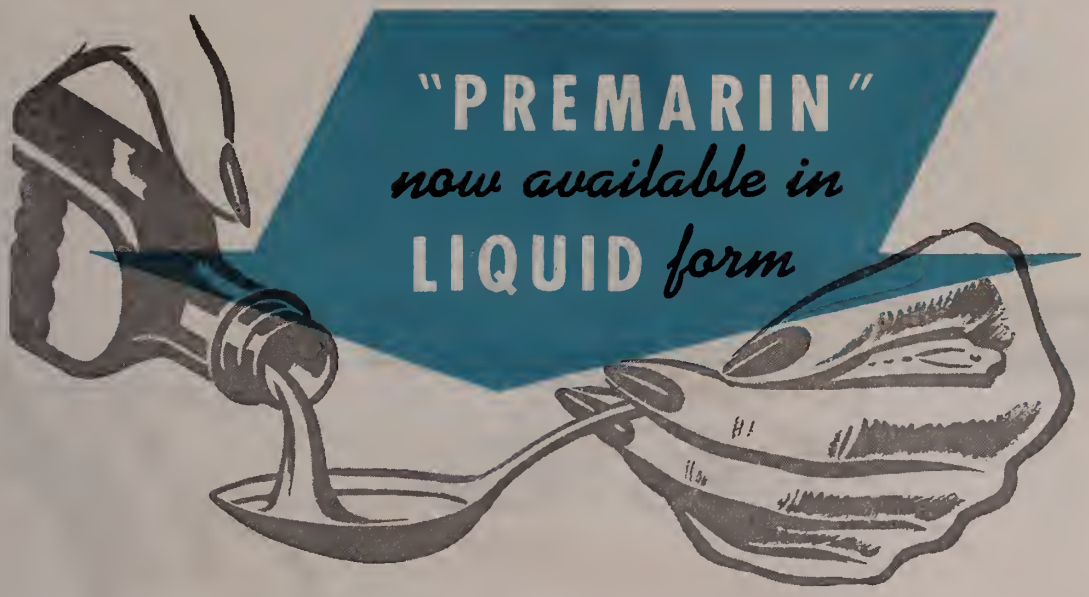
Frederick Stearns & Company

Division

DETROIT 31, MICHIGAN

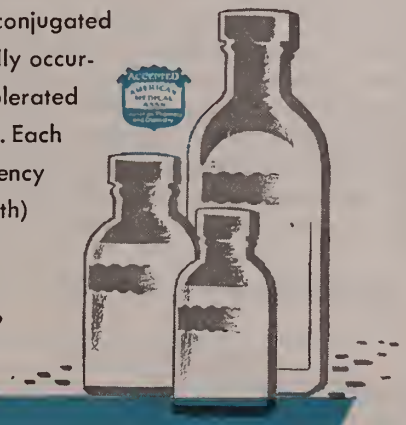
NEW YORK KANSAS CITY SAN FRANCISCO WINDSOR, ONTARIO SYDNEY, AUSTRALIA AUCKLAND, NEW ZEALAND

Trade-Mark Neo-Synephrine—Reg. U. S. Pat. Off.



"PREMARIN"
now available in LIQUID *form*

- To permit greater flexibility of dosage.
- To provide a graduated estrogenic intake where required.
- To accommodate those patients who are partial to liquid medication.
- *"Premarin"* Liquid . . . conjugated estrogens (equine) . . . naturally occurring . . . orally active . . . well tolerated . . . imparts a feeling of well-being. Each teaspoonful is the equivalent in potency of one "Premarin" Tablet (Half-Strength) No. 867.



Available in bottles of 120 cc. (4 fluid oz.), No. 869

"Premarin" Reg. U. S. Pat. Off. NOW IN LIQUID AND TABLET FORM

CONJUGATED ESTROGENS (equine)

Ayerst

AYERST, McKENNA & HARRISON LIMITED, 22 East 40th Street, New York 16, N. Y.



Hypochromic anemia, by impairing the oxygen-carrying power of the blood, may exert its deleterious influence on every organ of the body. Although the degree of depression of the hemoglobin level is often too slight to appear of clinical significance, the end result is frequently a syndrome comprising generalized vague, non-pathognomonic symptoms. The associated anorexia and consequent inadequate food intake, together with impaired digestion, all tend to initiate or accentuate multiple nutritional deficiencies.

Heptuna supplies ferrous sulfate, the most readily available form of iron for hemoglobin synthesis, together with seven essential vitamins and fortified with the B-complex vitamins found in liver and yeast. This combination makes for maximal absorption and utilization of iron, stimulates hemoglobin regeneration, and effectively corrects many of the generalized, systemic disturbances encountered in hypochromic anemia.

J. B. ROERIG & COMPANY • 536 Lake Shore Drive • Chicago 11, Illinois



Each Capsule Contains:

Ferrous Sulfate U.S.P.	4½ Grains
Vitamin A (Fish-Liver Oil)	5,000 U.S.P. Units
Vitamin D (Tuna-Liver Oil)	500 U.S.P. Units
Vitamin B_1 (Thiamine Hydrochloride)	2 mg.
Vitamin B_2 (Riboflavin)	2 mg.
Vitamin B_6 (Pyridoxine Hydrochloride)	0.1 mg.
Calcium Pantothenate	0.333 mg.
Niacinamide	10 mg.

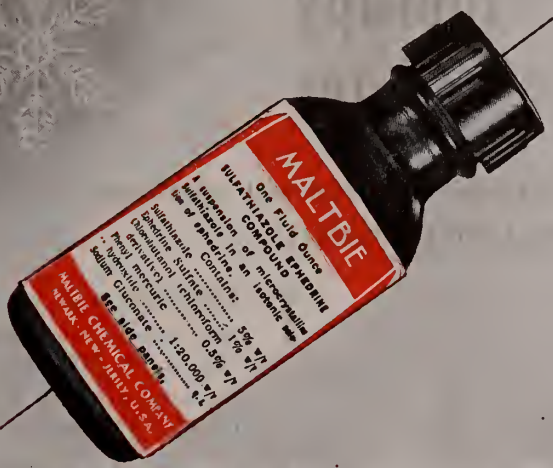
Together with a Liver Concentrate (Vitamin fraction) derived from 6.5 Gm. fresh liver and dried yeast U.S.P.
Not intended for use in the treatment of pernicious anemia.

Heptuna

a ROERIG *Preparation*

SNOW SWELLS NOSES

NO SWOLLEN NOSES SMELL



WELL NOSES SMELL ROSES

The newly announced Maltbie Sulfathiazole Ephedrine Compound offers effective and prolonged bacteriostatic action . . . rapid vasoconstriction . . . immediate bactericidal efficiency . . . and mild anesthesia, for intranasal administration where noses and sinuses are swollen by acute infections (particularly following the common cold). Isotonic, with a correct pH of 6 — it avoids irritation, and aids in restoring normal acidity of the mucosa, and in promoting normal ciliary movement.

THE MALTBIE CHEMICAL CO. (Founded in 1888) NEWARK 2, N. J.

FORMULA:

Microcrystalline sulfathiazole	5%
Ephedrine sulfate	1%
Chlorobutanol	0.5%
Phenyl mercuric hydroxide	1:20.000
Sodium Gluconate	q.s.

» » » **MALTBIE**

SULFATHIAZOLE EPHEDRINE COMPOUND

Maltbie's New Intranasal Bacteriostatic Vasoconstrictor

ESKADIAZINE

makes oral sulfadiazine therapy easier



ESKADIAZINE—the ideal oral sulfadiazine—has these three advantages:—

1 **Fluid Form.** This new fluid sulfadiazine is the ideal oral dosage form, especially for infants and children, and also for the many adults who object to tablet medication. Each 5 cc. (1 teaspoonful) contains 0.5 Gm. (7.7 gr.) of sulfadiazine.

2 **Exceptional Palatability.** Eskadiazine is so surprisingly palatable and pleasant in consistency that it is accepted willingly by all types of patients. Children actually like to take it.

3 **More Rapid Absorption.** The findings of a recent clinical study by Flippin and associates (Am. J. M. Sc., Aug. 1945) indicate that with Eskadiazine desired serum levels may be far more rapidly attained than with sulfadiazine administered in tablet form.

Smith, Kline & French Laboratories, Philadelphia, Pa.

S.K.F.'s new, outstandingly palatable fluid sulfadiazine for oral use



gentle reminder

For the patient with functional constipation, 'AGAROL'* Emulsion serves as a gentle reminder rather than a violent summons. This emulsion of mineral oil with phenolphthalein and an agar-gel permits effective, yet gentle relief through:

1. Replacement of lubricating factors with highly emulsified mineral oil and a colloidal gel similar to mucin in its lubricating properties.
2. Replacement of moisture through its distinctive hydrophilic action.
3. Minimal threshold stimulation of peristaltic activity.

These actions are integrated to promote the formation of a consolidated, lubricated and easily passed ecal mass. Simultaneously, they encourage physiologic restoration of the patient's own evacuatory mechanisms.

For additional pharmaceutical details consult your pharmacist—for more extensive medical data write Medical Division of William R. Warner & Co.

William R. WARNER and Co. Inc. 113 WEST 18TH STREET, NEW YORK 11, N. Y.

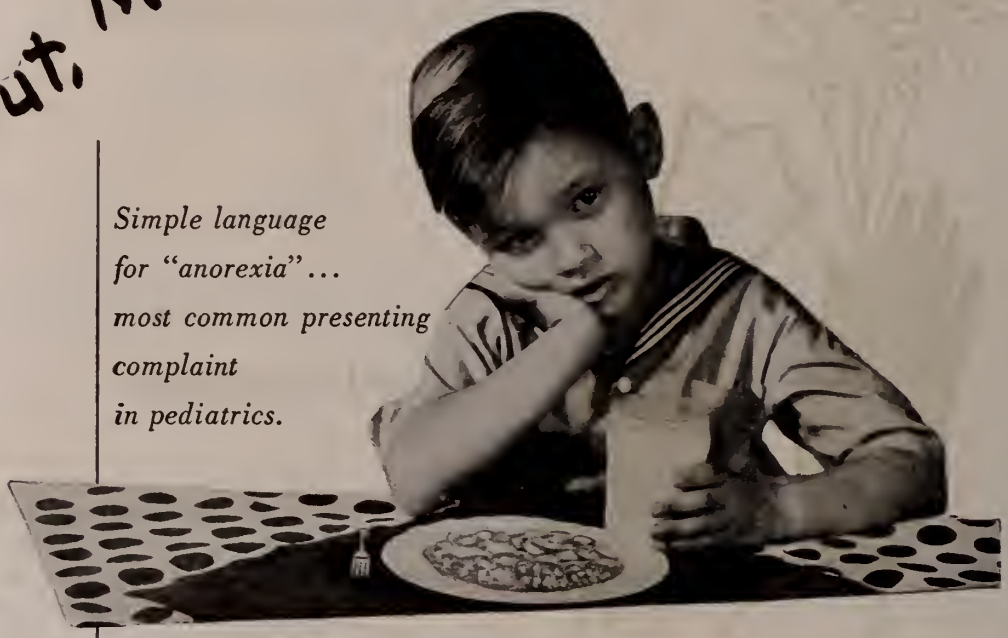
'agarol'

Emulsion of mineral oil with phenolphthalein and an agar-gel. Dispensed in bottles of 6, 10 and 16 fluidounces.

*Trademark Reg. U. S. Pat. Off.

But, Mom, I'm not hungry!

Simple language for "anorexia"... most common presenting complaint in pediatrics.



A special preparation such as 'RYZAMIN-B' NO. 2 is needed to meet the distinctive requirements of children when a fortified, natural B complex is indicated. Tasty, honey-like, rich 'RYZAMIN-B' NO. 2 may be made into a delicious spread with jam or peanut butter, may be dissolved in milk, fruit juice, or other beverages, or given directly from its special measuring spoon. Children enjoy the delicious taste.

The potency and palatability of 'RYZAMIN-B' NO. 2, derived from natural sources as a concentrate of oryza sativa (American rice) polishings fortified with pure crystalline B vitamins, make it a preparation of choice for both young and old.

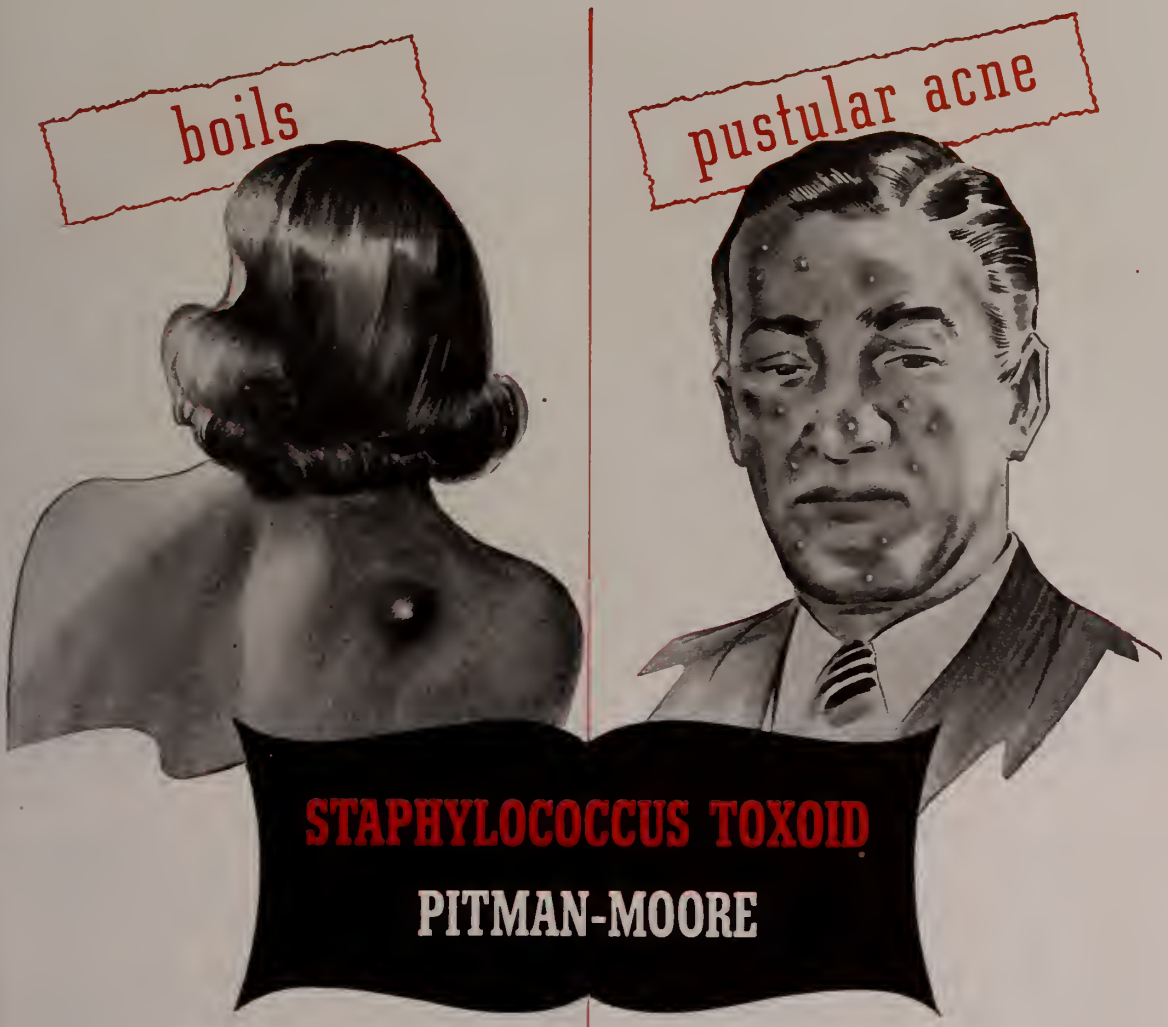
TUBES OF 2 OZ. AND BOTTLES OF 8 OZ. Three grams daily provide: Vitamin B_1, (Thiamine Hydrochloride) 3 mgm. (1,000 U.S.P. Units); Vitamin B_2 (Riboflavin) 2 mgm.; Nicotinamide 20 mgm. and other factors of the B complex... Gram measuring spoon with each packing.

'Ryzamin-B' registered trademark

'RYZAMIN-B' BRAND RICE POLISHINGS CONCENTRATE **No. 2**

with added thiamine hydrochloride, riboflavin, nicotinamide.

BURROUGHS WELLCOME & CO. (U.S.A.) INC., 9 & 11 EAST 41ST STREET, NEW YORK 17



STAPHYLOCOCCUS TOXOID
PITMAN-MOORE

AMONG the many conditions which especially enlist the sympathy of the physician—and tax his efforts to ameliorate the psychic as well as the somatic symptomatology—are boils and acne.

A growing literature reports the value of Staphylococcus Toxoid in the prophylaxis and therapy of various staphylococcic pyodermas and localized pyogenic processes due to *S. aureus* and *albus.* The toxoid induces the production of staphylococcus antitoxin in immunized persons, and there is accumulating evidence of its value in producing active immunity to the dermonecrotic and hemolytic elements of the toxins of *S. aureus* and *albus,* irrespective of the strain of the infecting organism.

Staphylococcus Toxoid (Pitman-Moore) is supplied in 5 cc. vials containing in each cubic centimeter the toxoid derived from 1,000 necrotizing doses of the toxin. Preserved with 1:10,000 sodium ethyl mercuri thiosalicylate. Comprehensive information with each package.

RECOMMENDED FOR TREATMENT AND PREVENTION OF

- Recurrent styes, boils, carbuncles
- Pustular acne associated with furunculosis
- Recurrent migratory staphylococcus abscesses of soft tissues and bone
- Staphylococcal infection of accessory nasal sinuses
- Other staphylococcal infections

ACCEPTED AMERICAN MEDICAL ASSN. Council on Pharmacy and Chemistry

PITMAN-MOORE COMPANY

PHARMACEUTICAL AND BIOLOGICAL CHEMISTS

Division of Allied Laboratories, Inc., · Indianapolis 6, Indiana

"by means of the chewing gum method..."

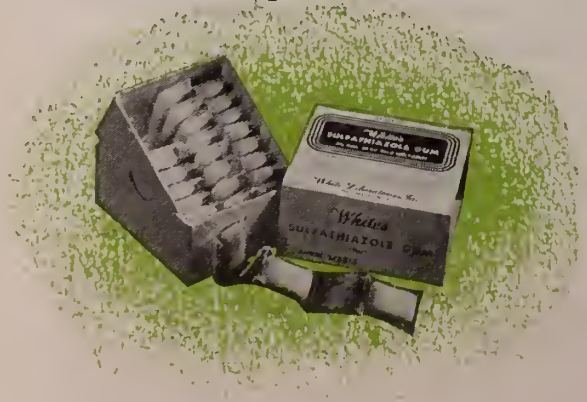
I believe the concentration of sulfathiazole can be maintained in the mouth . . . for some time, since the solubility of the drug is constant."

—CORRESPONDENCE: J.A.M.A., 122:1204 (AUG. 21) 1943

White's SULFATHIAZOLE GUM*

A single tablet chewed for *one-half to one hour* promptly provides a *high* concentration of locally active sulfathiazole (average 70 mg. per cent). This high concentration is sustained throughout the entire chewing period, in immediate contact with infected oral mucosal surfaces. Moreover, resultant blood levels of the drug, even with maximal dosage, are so low (rarely reaching 0.5 to 1 mg. per cent) that systemic toxic reactions are virtually obviated.

INDICATIONS: Local treatment of sulfonamide-susceptible infections of oropharyngeal areas; acute tonsillitis and pharyngitis; septic sore throat; infectious gingivitis and stomatitis, including acute Vincent's disease.



DOSAGE: One tablet chewed for *one-half to one hour* at intervals of one to four hours depending upon the severity of the conditions. If preferred, several tablets —rather than a single tablet—may be chewed *successively* during each dosage period without significantly increasing the amount of sulfathiazole systemically absorbed.

Available in packages of 24 tablets, sanitaped, in slip-sleeve prescription boxes.

IMPORTANT: Please note that your patient requires your prescription to obtain this product from the pharmacist.

*

A PRODUCT OF

WHITE LABORATORIES, INC.

PHARMACEUTICAL MANUFACTURERS

NEWARK 7, NEW JERSEY



what excites those allergic symptoms?

TRACK DOWN THE OFFENDERS BY THE SIMPLE — ACCURATE TUBEX* METHOD

WYETH ALLERGENIC TESTING SET

CONTAINS: Over 200 individual allergens in Tubex (N.N.R.), 1 Tubex syringe, 12 sterile needles, 20 diagnostic charts, 3 Tubex epinephrine hydrochloride, 3 Tubex buffered saline solution, 3 Tubex distilled water for cleansing the needles.

ALLERGENS ARE CLASSIFIED in four divisions: "A"—84 of the most frequently encountered; "B" and "C"—36 each of the less common; "D"—48 pollens and furs.

ALSO AVAILABLE: 40 Group Tests containing up to 6 allergens each (N.N.R.). 71 Special Allergens for Extended Testing (N.N.R.). Ragweed Combined Allergens, for Treatment (N.N.R.). *REG. U. S. PAT. OFF.



Wyeth

REG. U. S. PAT. OFF.

WYETH INCORPORATED • PHILADELPHIA 3 • PA.



Illustrated is the sulfathiazole-frosted pharynx of patient A.K., *two hours* after Paredrine-Sulfathiazole Suspension had been instilled intranasally.

WHY SUCH RAPID RELIEF

TO OBTAIN BEST RESULTS . . . the sore throat patient should not eat or drink fluids for one or two hours after instillation of Paredrine-Sulfathiazole Suspension. He should also make every effort to reduce nose-blowing and throat-clearing to a minimum.

Smith, Kline & French Laboratories, Philadelphia, Pa.

IN SORE THROAT ?

There are two important reasons why Paredrine-Sulfathiazole Suspension—when administered intranasally—is so successful in the treatment of acute nasopharyngitis:

1. Part of the Suspension remains beneath the middle and superior turbinates—and, mixing with sinus drip, retards the proliferation of bacteria before they reach the nasopharynx and intensify the infection.

2. Part of the Suspension drifts downward over the nasopharynx, forming a fine frosting on the nasopharyngeal mucosa. This thin blanket not only keeps producing a bacteriostatic solution at the site of infection, but also appears to provide marked surface analgesia.

PAREDRINE-SULFATHIAZOLE SUSPENSION

vasoconstriction in minutes

bacteriostasis for hours

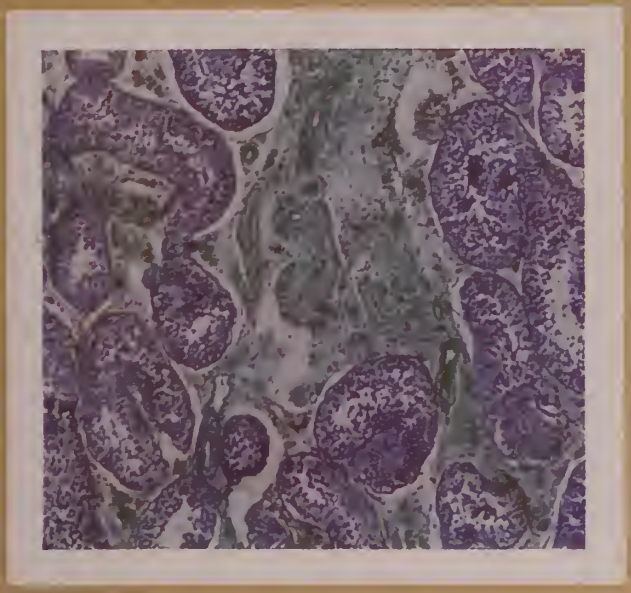


FOR WINTER COUGH

Syrup of Thiocol 'Roche' facilitates expectoration ... checks constant irritation which leads to coughing ... is particularly useful for children and infants ... does not contain sedatives or narcotics ... is not constipating ... contains 6 grains of Thiocol (potassium salt of orthoguaiacol-sulfonic acid) per teaspoonful. Supplied in bottles of 6 ounces ... HOFFMANN-LA ROCHE, INC., NUTLEY 10, N. J.

Syrup of Thiocol 'ROCHE'

Male Sex Hormones of Distinction



HUMAN TESTIS: Color photomicrograph. Transection of the tubules showing vorious stages af spermatogenesis. Male, 30 yeors of oge.

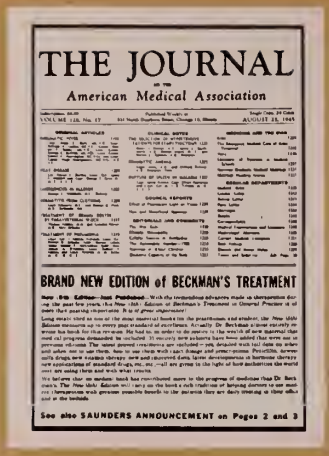
PERANDREN

TESTOSTERONE PROPIONATE

METANDREN LINGUETS

METHYLTESTOSTERONE

Ciba


THE JOURNAL
OF THE
American Medical Association
AUGUST 28, 1945
BRAND NEW EDITION of BECKMAN'S TREATMENT
See also SAUNDERS ANNOUNCEMENT on Pages 2 and 3

THE MALE CLIMACTERIC

"There is absolutely no basis for the belief that the man does not have a decrease in sex function in later life and that he cannot have a climacteric. . . . Testosterone propionate, by intramuscular injection of 25 mg. three times a week, has been found effective in relieving the symptoms and in the production of a sense of well-being in the patients, which is the primary objective of this treatment. . . . Testosterone may also be given orally, by inunction and by implantation."—A. A. Werner.

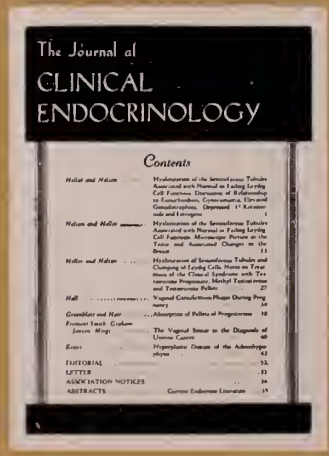
Journal of the American Medical Association, 127:705, 1945.


THE PENNSYLVANIA MEDICAL JOURNAL
VOLUME 47
NUMBER 1
IN THIS ISSUE
SIX FEATURE ARTICLES
NUTRITION TODAY
Page 44
TONSILLECTOMIES
An Editorial
THE AUXILIARY PRESIDENTIAL ADDRESS
Page 72
OCTOBER 1943
$3.00 PER YEAR
35c PER COPY

MALE HORMONE THERAPY

"As many as 34 different symptoms have been observed in the male climacteric; 20 of these are attributable to the nervous system and 9 of them to the circulatory system. . . . Under the influence of adequate hypodermic therapy 10 to 25 mg. of testosterone propionate two to five times a week, the average symptoms of the climacteric are usually relieved. . . ."—C. W. Dunn.

Pennsylvania Medical Journal, 48:780, 1945.


The Journal of
CLINICAL
ENDOCRINOLOGY
Contents

CLINICAL USE OF TESTOSTERONE IN THE MALE CLIMACTERIC

"We wish to urge the careful study of men from 50 to 65 years of age when they complain of vague and often apparently unrelated symptoms, for evidence of the climacteric, and a subsequent use of testosterone propionate, in an attempt to relieve their suffering."—S. F. Goldman and M. J. Markham.

Journal of Clinical Endocrinology, 2:237, 1942.

The Male Climacteric, directly associated with declining testicular function, is amenable to replacement therapy with PERANDREN and METANDREN, the Ciba male hormones.

PERANDREN

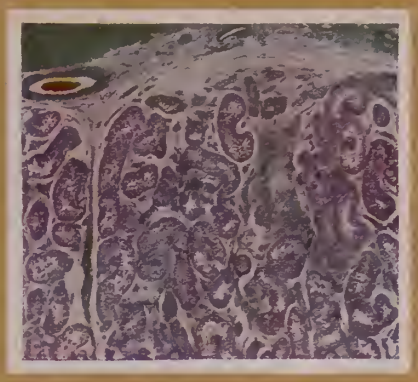
is testosterone propionate in sesame oil for intramuscular injection. This ester of the male sex hormone produces a rapid and prolonged clinical effect. It is the only economical form of male sex hormone for parenteral therapy since non-esterified testosterone gives only a fraction of the response obtained with testosterone propionate. Available as ampuls, 1 cc. each, in concentrations of 5, 10 and 25 mg. Boxes of 3, 6 and 50.

METANDREN LINGUETS

hard pressed wafers of methyltestosterone, are designed for absorption through the sublingual mucosa directly into the systemic circulation. This method of administration sidetracks the liver and prevents inactivation of the steroid known to take place when methyltestosterone is ingested. Each linguet contains 5 mg. of methyltestosterone, the androgenic activity of which is roughly equivalent to 1.5 to 2 mg. of PERANDREN by injection. Available in boxes of 30 and 100.

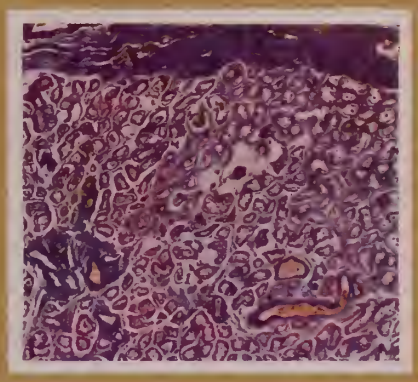
Perandren and Metandren Linguets
Trade Marks Reg. U.S. Pat. Off. & Can.

1



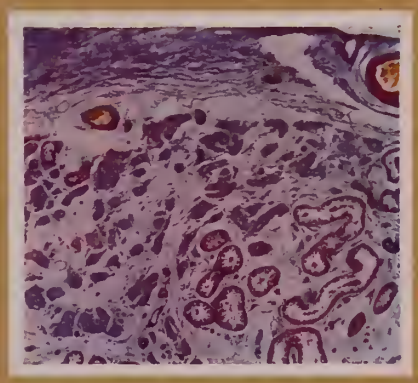
HUMAN TESTIS: Transection of the tubules. Normal male, 30 years of age.

2



HUMAN TESTIS: Transection of the tubules. Moderate atraphy. Male, 59 years of age.

3

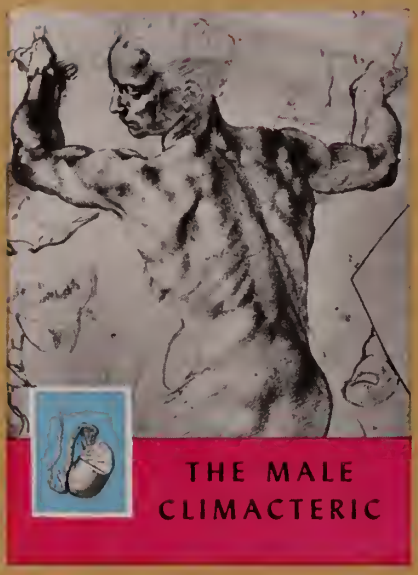


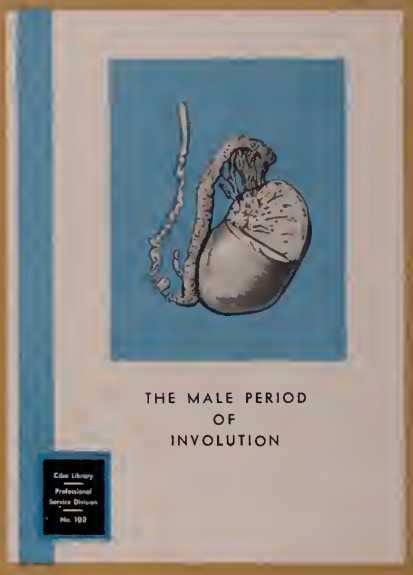
HUMAN TESTIS: Transection of the tubules. Atraphy. Male, 65 years of age.

The above micrascopic sections represent three stages of the testis in the male involution. The slides are Massan stained and photographed with Kodachrome Professional Film, Type B, 3¼" x 4¼".

Ciba

Ciba Literature of the Month





YOU WILL RECEIVE, DURING THE MONTH OF FEBRUARY, THE INTERESTING AND ATTRACTIVE FOLDER SHOWN ABOVE ON THE LEFT. THIS WILL GIVE YOU IN MORE DETAIL, YET IN CONCISE FORM, THE STORY OF THE SUCCESSFUL TREATMENT OF THE MALE CLIMACTERIC WITH THE STEROID HORMONES. IT WILL MAKE QUICK AND WORTHWHILE READING.

OFFERED AT THIS TIME, ALSO, IS No. 102 OF THE PROFESSIONAL SERVICE DIVISION'S LIBRARY SERIES. THIS FACTUAL SURVEY ARTICLE DISCUSSES THE RESULTS OF EXPERIMENTATION AND CLINICAL STUDIES ASSOCIATED WITH THE CLIMACTERIC SYNDROME AND PRESENTS A MOST EXTENSIVE BIBLIOGRAPHY. THIS IS SOMETHING YOU WILL WANT TO KEEP FOR REFERENCE. WRITE FOR IT ON YOUR LETTERHEAD.



Steroid Hormones and Fine Pharmaceuticals

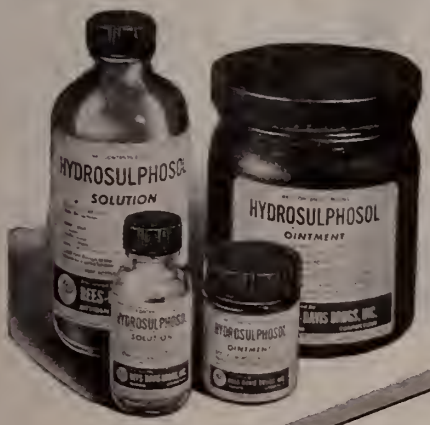
CIBA PHARMACEUTICAL PRODUCTS, INC.

SUMMIT, NEW JERSEY

In Canada: Ciba Company Limited, Montreal

A Fundamental Approach
TO SULFUR METABOLISM

HYDROSULPHOSOL



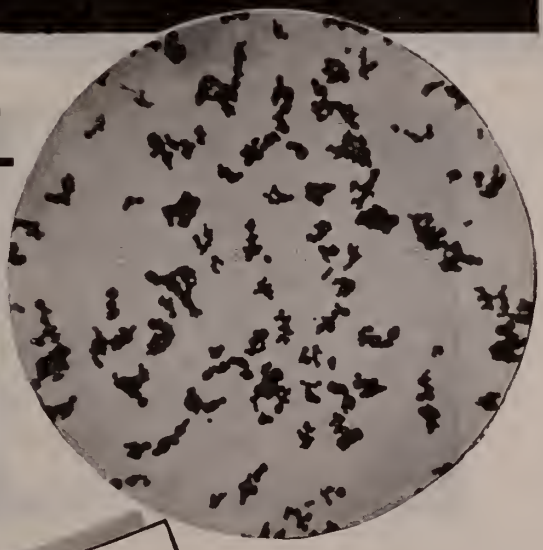


Illustration showing flowers of sulfur magnified 82X: small divisions = 10 microns. The size of the colloidal sulfur particle in Hydrosulphosol is estimated at 1/1000 of a micron or 1/10,000 of the small division particle illustrated.

A true solution of sulfur bearing compounds resulting solely from the reduction of flowers of sulfur by a catalytic process. In aqueous solution, it is capable of releasing its unusually high concentration of sulfhydryl ion in readily utilizable form . . . without evidence of toxic reaction.

Its therapeutic importance may best be evaluated by the fact that the —SH radical of the cysteine forms the active group in glutathione, alone of reported importance in connection with tissue oxidations.

Hydrosulphosol is indicated in the management of burns, ulcers and pathological conditions in which sulfur metabolism is a clinical consideration.

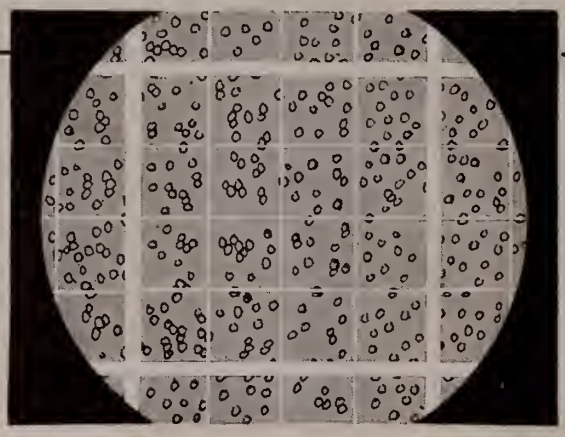
Reprints of scientific papers by authoritative investigators available on request.

R D

Rees-Davis Drugs, Inc.
MERIDEN, CONNECTICUT

Number 3 of a Series

IN ANEMIA OF CHRONIC BLOOD LOSS





In the management of chronic blood loss, therapy designed to support red cell and hemoglobin formation is essential. Iron must be supplied to correct hypochromia; liver and the B vitamins bolster an overworked bone marrow in the production of red cells. The combination is more effective than iron alone.

HEPATINIC

presents iron in readily assimilable ferrous form, together with Crude (Unfractionated) Liver Concentrate and Vitamin B Complex.

Crude (Unfractionated) Liver Concentrate is prepared so that it retains the erythropoietic and nutritional principles of whole liver, which are lost in the highly refined concentrates. Furthermore, it is subjected to enzymatic digestion to provide maximum assimilation and prompt therapeutic response.

The appealing and palatable taste of Hepatinic assures patient acceptance and particularly recommends the product for pediatrics.

FORMULA: Each fluidounce Elixir Hepatinic contains:

Ferrous Sulfate 12 gr., Crude (Unfractionated) Liver Concentrate (equivalent to 660 gr. fresh liver) 60 gr. Thiamine Hydrochloride 2 mg., Riboflavin 4 mg., Niacinamide 20 mg., together with pyridoxine, pantothenic acid, choline, folic acid, vitamin B_{10}, vitamin B_{11}, biotin, inositol, para-amino-benzoic acid, and other factors of the vitamin B complex.

Bottles of one pint and one gallon. Tasting samples on request.

McNeil Laboratories
INCORPORATED
PHILADELPHIA • PENNSYLVANIA

More pleasure to you, Doctor!

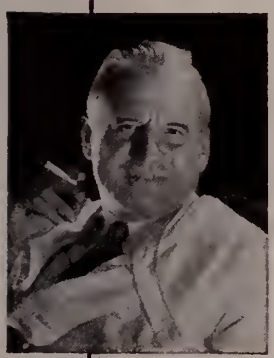
THREE nationally known research organizations recently reported the results of a nationwide survey to discover the cigarette preferences of physicians and surgeons.

Physicians all over the United States were asked the simple question: "What cigarette do you smoke, Doctor?" The question was put solely on the basis of *personal preference as a smoker.*

The thousands and thousands of answers from these physicians in every branch of medicine were checked and re-checked. The result:

More physicians named Camel as their favorite smoke than any other cigarette. And the margin for Camels was most convincing.

Certainly the average physician is busier today than ever before and is deserving of every bit of relaxation he can find in his day-by-day routine . . . a cigarette now and then if he likes. And the makers of Camels are glad to know that physicians find in Camels that extra margin of smoking pleasure that has made Camels such a favorite everywhere.



According to this recent nationwide survey:

More Doctors Smoke Camels

than any other cigarette



R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

NEW LAMINATED PELLET



FOR

PROPHYLAXIS AND THERAPY OF MULTIPLE VITAMIN DEFICIENCY

EACH PELLET CONTAINS



Vitamin A From fish liver oil	5000 U.S.P. units
Vitamin B_1 Thiamine Hydrochloride	2 mg.
Vitamin B_2 Riboflavin	2 mg.
Vitamin B_6 Pyridoxine Hydrochloride	0.5 mg.
Calcium Pantothenate	1 mg.
Niacinamide	20 mg.
Vitamin C Ascorbic Acid	50 mg.
Vitamin D Chemically pure synthetic vitamin D_2 (calciferol) from ergosterol	1000 U.S.P. units

VITAMINS

PLURAVIT....

Trademark Reg. U. S. Pat. Off.

Brand of MULTIPLE VITAMINS

• • SMALL, EASY TO SWALLOW, PLEASANT TASTING PELLETS, WITHOUT AFTER-TASTE.

WINTHROP CHEMICAL COMPANY, INC.
PHARMACEUTICALS OF MERIT FOR THE PHYSICIAN
NEW YORK 13, N. Y. WINDSOR, ONT.

111P



The dyes have it

Treatment of genito-urinary infections is simplified by prescribing Serenium, the safe red azo dye (diamino 4'-ethoxy-azobenzene hydrochloride). Bacteriostatic against a wide range of urinary tract invaders, Serenium is effective in either acid or alkaline urine without crystal formation and without toxicity. Where other agents may be contraindicated, Serenium affords dependable, safe therapy of genito-urinary infections.

SQUIBB

Serenium
TRADEMARK

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858

The Preference is Overwhelming

A comprehensive report published in *Human Fertility*[1] shows an overwhelming preference by experienced clinicians for the "Diaphragm and Jelly" method of conception control.

The report covering 36,955 new cases shows that the diaphragm and jelly method was prescribed for 34,314, or 93%.

On the evidence supplied by competent clinicians we continue to suggest that for the optimum in protection the physician should prescribe the combined use of a vaginal diaphragm and spermatocidal jelly.

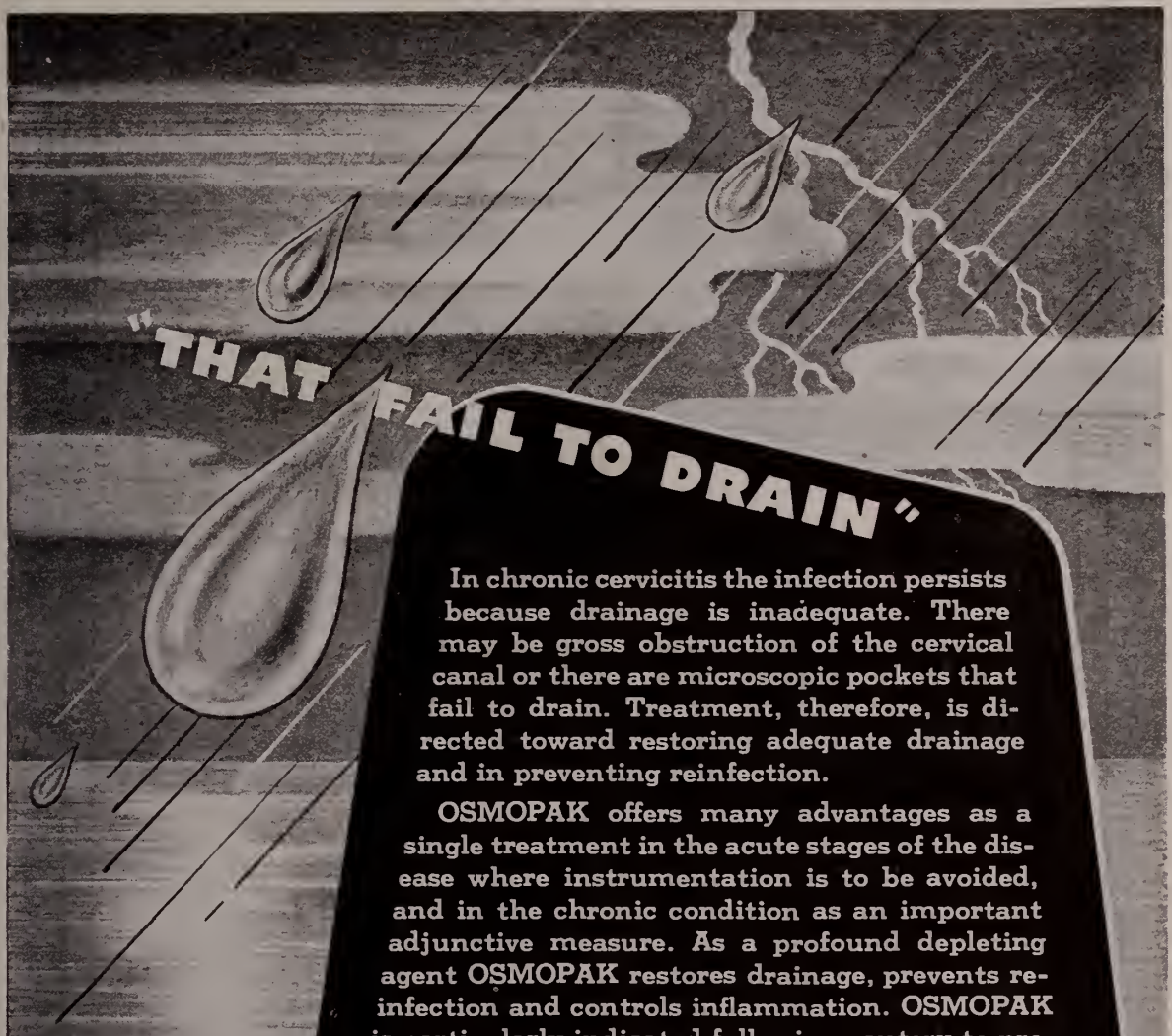
When you specify "RAMSES"* a product of highest quality is assured.

Gynecological Division
JULIUS SCHMID, INC.
Established 1883
423 West 55th Street New York 19, N. Y.

1. Human Fertility, 10:25, March, 1945.



*The word "RAMSES" is a registered trademark of Julius Schmid, Inc.



"THAT FAIL TO DRAIN"

In chronic cervicitis the infection persists because drainage is inadequate. There may be gross obstruction of the cervical canal or there are microscopic pockets that fail to drain. Treatment, therefore, is directed toward restoring adequate drainage and in preventing reinfection.

OSMOPAK offers many advantages as a single treatment in the acute stages of the disease where instrumentation is to be avoided, and in the chronic condition as an important adjunctive measure. As a profound depleting agent OSMOPAK restores drainage, prevents reinfection and controls inflammation. OSMOPAK is particularly indicated following cautery to produce a quicker, cleaner healing and a better slough where scar formation often impedes proper drainage. The product is easily applied by tampon with the standard bivalve speculum or with the improved OSMOPAK GLASS SPECULUM.

OSMOPAK is a research development of Irwin-Neisler, presents a water-miscible gel of Magnesium Sulfate 58% with Benzocaine and Brilliant Green. Available in 12 and 24 oz. jars through prescription stores everywhere.

OSMOPAK

REG. U. S. PAT. OFF.

60th ANNIVERSARY Irwin NEISLER

Write for descriptive booklet on modern treatment of cervicitis.

IRWIN, NEISLER & CO., DECATUR, ILLINOIS

In Penicillin Ointment, Too...



CONTROL IS VITAL

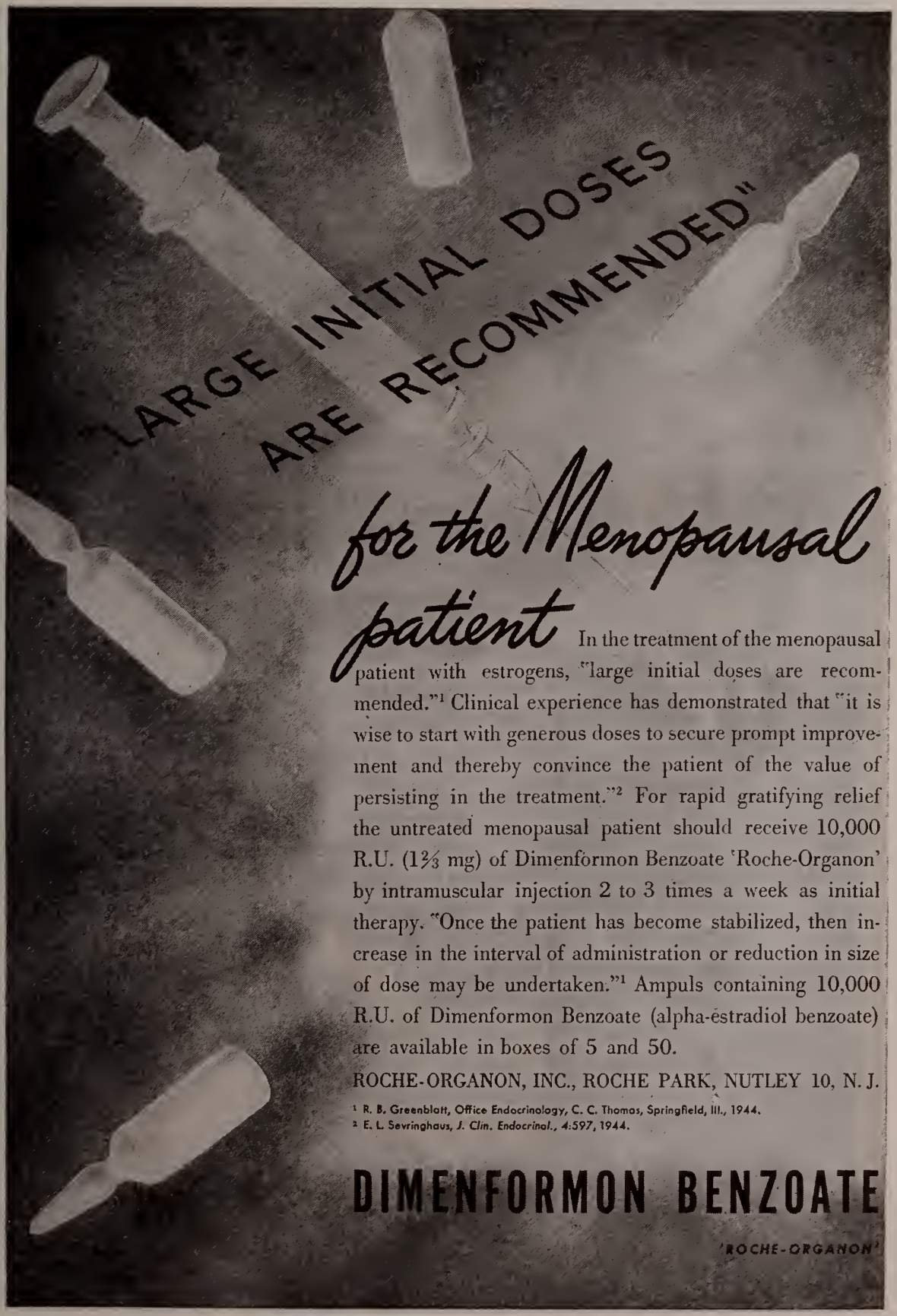
When you specify Penicillin Ointment Schenley, you are assured of the highest standard of purity and excellence, because Schenley Laboratories maintains the same rigid program of control for this ointment as it has always maintained for Penicillin Schenley.

Penicillin Ointment Schenley is indicated in the treatment of superficial infections of the skin caused by penicillin-sensitive organisms. In deep-seated pyogenic infections with penicillin-sensitive organisms, the ointment may be used as an adjunct to systemic penicillin therapy and other measures.

SCHENLEY LABORATORIES, INC.
Executive Offices: 350 Fifth Avenue, New York City

Your Local Distributor for **PENICILLIN Ointment** SCHENLEY *is:*

Chicago	Evanston	Moline	Peoria
Chemists Supply Co. Debs Hospital Supplies Ill. Surgical Supply Co Sheridan Phys' Sup. Co. Thompson Medical Sup.	D. S. Lyman, Pharmacist	Otto Schweinberger & Company	Sutliff & Case Co., Inc.



for the Menopausal patient

In the treatment of the menopausal patient with estrogens, "large initial doses are recommended."[1] Clinical experience has demonstrated that "it is wise to start with generous doses to secure prompt improvement and thereby convince the patient of the value of persisting in the treatment."[2] For rapid gratifying relief the untreated menopausal patient should receive 10,000 R.U. (1⅔ mg) of Dimenformon Benzoate 'Roche-Organon' by intramuscular injection 2 to 3 times a week as initial therapy. "Once the patient has become stabilized, then increase in the interval of administration or reduction in size of dose may be undertaken."[1] Ampuls containing 10,000 R.U. of Dimenformon Benzoate (alpha-estradiol benzoate) are available in boxes of 5 and 50.

ROCHE-ORGANON, INC., ROCHE PARK, NUTLEY 10, N. J.

[1] R. B. Greenblatt, Office Endocrinology, C. C. Thomas, Springfield, Ill., 1944.
[2] E. L. Sevringhaus, *J. Clin. Endocrinol.*, 4:597, 1944.

DIMENFORMON BENZOATE

'ROCHE-ORGANON'

Master Builders of ENDOCRINOLOGY



GEORGE REDMAYNE MURRAY
1865-1939

George Redmayne Murray first recorded the progress of a myxedematous patient who had been treated with a glycerin extract of sheep's thyroid gland. Glandular therapy owes much to this master builder whose keen perception, courage and imagination have helped make it possible for many to lead longer and more fruitful lives.

To dedicate our efforts to the advancement of medical science . . . to contribute in increasing measure to the practical application of knowledge in the service of mankind . . . that is the aim of Harrower research.

Special skills and knowledge, acquired during more than a quarter-century of application to the production of endocrines and pharmaceuticals of distinction, confer a continuing and growing obligation to develop products worthy of the finest traditions of medicine and related sciences.

The HARROWER LABORATORY, *Inc.*
GLENDALE 5, CALIFORNIA
NEW YORK 7 DALLAS 1 CHICAGO 1

IMPROVED CLEANSING

without HARSH SCRUBBING



in Acne Vulgaris

Better cleansing in acne vulgaris was successfully attained when Acidolate—replacement for soap—was used as the skin cleansing agent in over 400 acne vulgaris patients during a period of four years.[1]

Acidolate, the original and only sulfated-oil detergent with a background of extensive clinical research, offers the following advantages as a skin cleanser in acne vulgaris:—

1. Achieves thorough and better cleansing by gentle massage instead of harsh scrubbing.
2. Removes excess sebum as well as other fatty materials and loosens epithelial debris.
3. Seems to lessen formation of new comedones and facilitates removal of those that do form.
4. The acidity of Acidolate (pH 6.25) approximates that of normal skin and does not change the protective action of sweat.
5. Renders the skin receptive to the action of prescribed therapeutic agents.
6. Insures the patient's cooperation because of early, favorable response to the "Acidolate Massage" cleansing technique.
7. Contains no alkalis, no irritating fatty acids of low molecular weight and no allergenic substances.
8. Water miscible, Acidolate rinses off readily with hot or cold, hard or soft water.

Printed instruction sheets for use of Acidolate by acne vulgaris patients available to physicians on request.

Other indications: *When soap is contraindicated,* as in dermatitis venenata, eczema, seborrhea, etc.; when soap is *inadequate* as in removing residual ointments.

Supplied in
8 oz. and gallon bottles

LITERATURE AND SAMPLE ON REQUEST

Distributed for NATIONAL OIL PRODUCTS CO. *by*

RARE CHEMICALS, INC.
Harrison, New Jersey

1. Swartz, J. H., and Blank, I. H.: J.A.M.A., 125:30 (May 6), 1944.

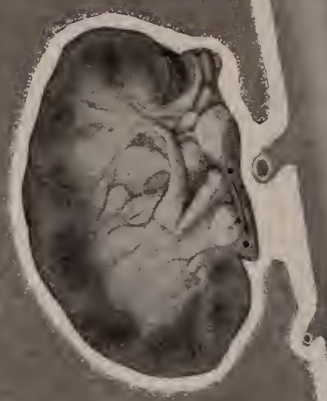
83J

ACIDOLATE

"Acidolate" Reg. U. S. Pat. Off.

FIFTH IN A SERIES OF CHALLENGES TO MEDICINE'S

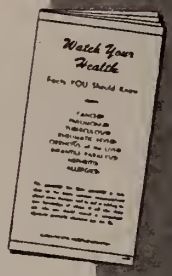
Achievements For Tomorrow



• NEPHRITIS stood fourth in causes of death in 1942*.

This is one disease from which thousands could be saved if people were educated to visit their physicians for periodic checkups, because nephritis gives no warning symptoms in its early stages. A physician's thorough examination and tests would disclose the otherwise unsuspected nephritic condition.

To help in educating the laity in the importance of regular examinations, we have prepared a pamphlet — "Watch Your Health". Nephritis is one of the seven serious diseases explained in simple terms. Copies are available to physicians on request.

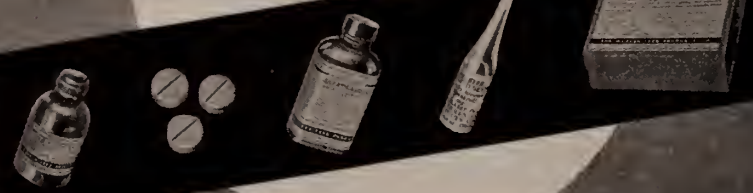


* U. S. Summary of Vital Statistics, 1942.

WARREN-TEED

Medicaments of Exacting Quality Since 1920

THE WARREN-TEED PRODUCTS COMPANY, COLUMBUS 8, OHIO



Warren-Teed Ethical Pharmaceuticals: capsules, elixirs, ointments, sterilized solutions, syrups, tablets. Write for literature.

Table of Contents

FEBRUARY, 1946
VOL. 89, NO. 2

ORIGINAL ARTICLES

Hematology, A Round Table, *Howard Alt, M.D., Steven Otto Schwartz, M.D., and Louis Limarzi, M.D.*, Chicago 62

Functional Nervous Disorders, *S. N. Clark, M.D.*, Jacksonville 68

Perianal Urticaris, *Charles J. Drueck, Sr., M.D.*, Chicago 72

Treatment of the Convulsive State at the Illinois Security Hospital, *Alex J. Arieff, M.D.*, Chicago 74

Surface Defects of Skin: Treatment by Controlled Exfoliation, *Joseph C. Urkov, M.D.*, Chicago 75

Tuberculous Peritonitis Case Reports with Pathological Findings, *Captain Paul K. Anthony, M.C.* 82

EDITORIALS

The Special Meeting of the House of Delegates .. 49

In Memoriam — *Carl Ellsworth Black* 51

Separations from the Service 53

P.R.N., *Charles G. Farnum, M.D.* 100

Book Reviews 71

STATE DEPARTMENT OF PUBLIC HEALTH

Services Rendered by a County Health Department, *Richard F. Boyd, M.D., M.P.H.* 55

Cultures as an Aid in the Diagnosis of Gonorrhea . 57

CORRESPONDENCE

Successful Staff Meetings Described 60

Interstate Postgraduate Medical Associations of North America 61

Program for the Care of Premature Infants 61

PHYSICAL MEDICINE ABSTRACTS 86

MEDICINE AND THE ARMED FORCES

Hospital Residencies under the G.I. Bill 89

Department of Medicine and Surgery in the Veterans Administration 92

Veterans Administration Seeks more Army Hospitals 94

Illinois Doctors Awarded Military Decorations .. 94

NEWS OF THE STATE

Coming Meetings, Personals, Marriages, Deaths .. 95

★ ★

You're Invited

To The

ANNUAL MEETING

Of The

ILLINOIS STATE MEDICAL SOCIETY

PALMER HOUSE
CHICAGO
MAY 14, 15, 16

★ ★

COOPER CREME

The Original Spermicidal Creme

No Finer Name in Contraceptives. .

ACCEPTED AMERICAN MEDICAL ASSN. Council on Pharmacy and Chemistry

Active ingredients:
Trioxymethylene 0.04% Sodium Oleate 0.67%

Prescribed For Over A Decade

WHITTAKER LABORATORIES, INC.
PEEKSKILL, NEW YORK





Silhouette of Significance

THE PRODUCTION of vitamin products used in modern medical practice involves continual and diversified research. The Lilly Laboratories, besides engaging in pure scientific pursuits and rigid control activities, are especially organized to solve the many perplexing problems of large-scale manufacture. An ever-vigilant scientific staff assures the physician that only the finest materials are used and that finished products are true to label formula. The Lilly Label is profoundly significant. It is the symbol of dependability, a dependability that has made Lilly Vitamin Products the choice of many discriminating physicians. Lilly Vitamin Products are intended for prescription use only and are never advertised to the public.

Eli Lilly and Company, Indianapolis 6, Indiana, U.S.A.

Meeting the needs of all diabetics

CAREFUL supervision of the individual diabetic is essential to successful treatment. Diet, exercise, and Insulin dosage must be skillfully balanced, adjusted to individual requirements. Iletin (Insulin, Lilly); Iletin (Insulin, Lilly) made from zinc-Insulin crystals; and Protamine, Zinc & Iletin (Insulin, Lilly) are available to meet these exacting needs. The overlapping Insulin effect of injections of Protamine Zinc Insulin is one of its most valuable characteristics, protecting against acidosis and nitrogen wastage. Intermediate effects may be obtained by suitable combinations of Iletin (Insulin, Lilly) and Protamine, Zinc & Iletin (Insulin, Lilly).

ELI LILLY AND COMPANY
INDIANAPOLIS 6, INDIANA, U. S. A.





12X15 REPRODUCTION OF THIS HAROLD ANDERSON PAINTING SUITABLE FOR FRAMING IS AVAILABLE UPON REQUEST

From childhood's happy hours

FEW PHYSICIANS can define with any degree of certainty the unaccountable impulse that eventually led to the study of medicine. If they were to reach far back into the dusty recesses of memory, they could perhaps recall a time when mother, or sister, or brother was ill and the doctor came to call. They could remember the intriguing instruments which he carried, but more vividly, how fear and apprehension were dissipated with his comforting assurance. From the shadow of such an experience came many physicians of today.

The will to serve sometimes has been an inspiring influence to industrial, as well as to professional enterprises. In order to withstand the pressure of changing times, a business as well as a profession must be anchored to something basically fundamental. It must have a mission to perform, an objective high in the ranks of worthy causes. Just as medical practice has evolved with social and scientific progress, so has Eli Lilly and Company endeavored throughout its seventy years of existence to broaden its sphere of usefulness.



A picture of The Good Samaritan provided the inspiration that eventually led to the founding of Eli Lilly and Company

The Illinois Medical Journal

February, 1946

VOL. 89, NO. 2

Official Journal of the Illinois State Medical Society

EDITOR — Harold M. Camp. EDITORIAL BOARD — James H. Hutton, Chairman, Frederick H. Falls, Josiah J. Moore, Edwin M. Miller, Chauncey C. Maher, Harry S. Gradle, Harry Culver, Walter Stevenson, Raymond W. McNealy.

Editorials

THE SPECIAL MEETING OF THE HOUSE OF DELEGATES

The January issue of the Illinois Medical Journal carried a short notice of the special meeting of the House of Delegates of the Illinois State Medical Society held at the Hotel Sherman, Chicago, on Sunday, January 6, 1946. The meeting, arranged on short notice and under great difficulties, owing to the fact that one of the largest conventions of the year was in progress in Chicago at the time, was well attended, there being approximately 118 delegates present.

The first subject on the agenda for the special meeting was to hear the final report and recommendations of the Committee on the Study of Prepayment Plans for Medical and Surgical Care, this committee having held many meetings since it was appointed by the Council as recommended by the House of Delegates at the 1944 Annual Meeting, and had given careful consideration to all plans in operation for voluntary prepayment medical and surgical care.

Many groups had been interviewed at these many sessions, and even though a suitable enabling act had been passed at the last session of the Illinois Legislature, it was finally the unanimous opinion of this committee that it would be best to recommend an indemnity plan with commercial carriers, which would develop a policy to give the benefits as recommended by the committee, and at a minimum cost to the policyholders in keeping with the committee's recommendations.

Members of the Committee were given definite and pertinent subjects which were presented to the House of Delegates, following the report of the committee chairman, Dr. Charles H. Phifer. In order that careful consideration might be given to the subject of medical service plans, an outstanding director of a medical service plan, who is well informed on the subject, was presented, and he gave a highly informative talk on the advantages of medical service plans, as he saw them, and was asked to answer any questions asked by the delegates present. A considerable amount of time was devoted to this question and answer period, every delegate having the opportunity of either asking questions, or giving their own views on the subject.

When the question was finally called, the House by an overwhelming majority voted to approve the report and recommendations of the committee, to place in operation as soon as possible, an indemnity plan. The House also voted unanimously to make this special committee of the Council, the official State Society Committee to carry on, arrange for the selection of suitable companies willing to issue the recommended type of polices, and to act as the Society Advisory Committee.

The second subject on the agenda was pre-

sented by the Secretary, who had recently made a trip to Washington to confer with representatives of Maj. Gen. Paul R. Hawley, Chief of Medical Services in the Veterans Administration, in reference to an Illinois Plan for the care of veterans with service connected disabilities, these men to be cared for at home by the physician of their choice.

The subject was presented to the House in more detail by Percy E. Hopkins, M. D., chairman of the Council and its special committee appointed to draw up a tentative plan to be presented before the House of Delegates. The plan, as approved by the Council, was presented by Doctor Hopkins, and at the same time a fee schedule which had been approved by another State Medical Society, then by the Veterans Administration, was passed out to all delegates for their information.

After a short general discussion on the subject, the plan as proposed by General Hawley was unanimously approved. The tentative Illinois Plan as approved by the Council was likewise unanimously approved by the House. When consideration was given to the fee schedule, which had been mimeographed and passed out to all members, the schedule was approved in principle, and the committee was instructed to go over same in much detail, make perhaps a few minor changes as seemed desirable, then the plan and schedule were to be submitted to the Veterans Administration for final approval.

It was suggested by the House of Delegates that the Secretary be instructed to send copies of this schedule to a group of specialists in the several specialties to get their suggestions as to the fees pertaining to their special line of work. The President urged members of the House of Delegates to look the entire schedule over critically and note any changes which they believed should be made, and send same to the committee as early as possible.

Following the meeting, the recommendations of the House in regard to the fees for services to be rendered, were carried out by the Secretary, copies being sent to a considerable number of Illinois physicians in various specialties to get their individual comments and recommendations. The committee will meet early in February and after all proposed changes have been carefully

ILLINOIS STATE MEDICAL SOCIETY

GENERAL OFFICERS, 1944-1945

PRESIDENT ..... EVERETT P. COLEMAN, Canton
PRESIDENT-ELECT ..... ROBERT S. BERGHOFF, Chicago
1ST VICE-PRESIDENT .... HARRY M. HEDGE, Chicago
2ND VICE-PRESIDENT .... WALTER C. BLAINE, Tuscola
SECRETARY-TREASURE .. HAROLD M. CAMP, Monmouth

THE COUNCIL

L. J. Hughes.....1st District, Elgin.....1944
E. C. Cook.....2nd District, Mendota.....1944
Oscar Hawkinson...3rd District, Chicago.....1946
Percy E. Hopkins...3rd District, Chicago.....1944
E. W. Mueller.....3rd District, Chicago.....1945
Chas. P. Blair.....4th District, Monmouth...1946
Ralph P. Peairs.....5th District, Normal.....1946
Walter Stevenson....6th District, Quincy.....1945
I. H. Neece.....7th District, Decatur.....1946
C. E. Wilkinson....8th District, Danville.....1946
Andy Hall.....9th District, Mt. Vernon..1945
G. C. Otrich.....10th District, Belleville.....1945
Ed. S. Hamilton...11th District, Kankakee....1944
Edward H. Weld....At Large, Rockford.....1946
Chas. H. Phifer.....At Large, Chicago.....1945
Chairman of the Council.....Percy E. Hopkins

ILLINOIS MEDICAL JOURNAL

Harold M. Camp, Monmouth.....Editor
L. E. Malley, Chicago....Managing Editor & Business Mgr.

GENERAL COUNSEL

Edward W. Rawlins.....77 West Washington St., Chicago

LEGISLATIVE COMMITTEE

James H. Hutton, Chairman....30 N. Michigan Ave., Chicago

EDUCATION COMMITTEE

R. R. Ferguson, Chairman..4013 N. Milwaukee Ave., Chicago
Miss Jean McArthur, Secretary.30 N. Michigan Ave., Chicago

PERMANENT COMMITTEE ON ARCHIVES

D. D. Monroe, Chairman.....Alton
C. E. Black.....Jacksonville
P. J. McDermott.....Kewanee

SCIENTIFIC SERVICE COMMITTEE

Robert S. Berghoff, Chairman..30 N. Michigan Ave., Chicago
Harold M. Camp, Secretary.....Monmouth

JOURNAL COMMITTEE

Percy E. Hopkins, Chairman.....800 W. 78th St., Chicago
Harry J. Stewart, Secretary.....715 Lake St., Oak Park

Outside of editorial or allied views or statements that are the authoritative actions of the Illinois State Medical Society, the organization denies responsibility for opinions and statements published in the ILLINOIS MEDICAL JOURNAL. Views expressed by the various authors and views set forth in various departments in the JOURNAL represent the views of the writers.

State Society will pay no bills for legal services except those contracted by the Committee. Notify the Chairman at once. Do not employ attorneys.

Send advertising copy, cuts and all communications relating to advertising to ILLINOIS MEDICAL JOURNAL, 30 N. Michigan Avenue, Chicago.

Original articles and membership correspondence to Dr. Harold M. Camp, Monmouth, Ill.

Society proceedings and news items and changes in the mailing list to Managing Editor, 30 N. Michigan Ave., Chicago 2, Illinois.

Subscription price of this JOURNAL to persons not members of the Illinois State Medical Society is $3.00 per year, in advance, postage prepaid, for the United States, Cuba, Porto Rico, Philippine Islands, Hawaiian Islands and Mexico. $4.00 per year for all foreign countries included in the postal union. Canada, $3.50. Single current copies, 50 cents.

considered will be ready to submit the proposed Illinois plan, as approved by the House of Delegates, and the revised fee schedule to the office of General Hawley in the Veterans Administration for final approval, so the plan may be placed in operation in Illinois at the earliest possible moment.

Dr. Everett P. Coleman, Canton, Illinois, presided over the House of Delegates in a highly efficient manner, giving every delegate the opportunity to ask any questions or give individual opinions on the subjects under discussion. Although the transactions were completed in one day, it was a long day, the delegates were patient, intensely interested, and all present were thoroughly impressed with the importance of the subjects that were schedule on the agenda.

It seems quite probable that the complete transactions of this special meeting will be published in full in the March issue of the Illinois Medical Journal.

IN MEMORIAM
CARL ELLSWORTH BLACK
1862 - 1946

Carl E. Black, M. D., a practicing physician at Jacksonville for more than 58 years, died suddenly at the Dunlap Hotel, Jacksonville, on Sunday evening, January 13, while in conference with other physicians. Dr. Black served as president of the Illinois State Medical Society in 1904, and for many years after holding this office, was a regular attendant of the annual meetings. During the recent World War, he acted as secretary of his own Morgan County Medical Society during the absence of all of the younger men from his community. At the regular meeting of the society on January 10, Dr. Black tendered his resignation as secretary with the following statements: "The war is over and many of the younger physicians formerly in service have returned to their practice, and it is up to them to take over the responsibilities of arranging for the regular monthly meetings, seeing that suitable programs are arranged and let us older men sit on the sidelines."

Dr. Black was born at Winchester Illinois, on July 4, 1862. His father, Dr. G. V. Black, became known throughout the world as the father of modern dentistry, and was made the first Dean of Northwestern University Medical School of Dentistry, a position which another son, Dr. Arthur Black, likewise held for a considerable number of years. Dr. Black received his B. S. degree from Illinois College, Jacksonville, in 1883, and his degree in Medicine from the Chicago Medical School, which later became the Medical School of Northwestern University in 1887. Upon the completion of 50 years in medicine, his county society held a special meeting in Jacksonville, at which time he was made a member of the Fifty Year Club of the Illinois State Medical Society, and received the membership certificate and emblem which is presented by the State Society to physicians who have completed fifty years in medicine.

During World War I, Dr. Black was a member of the American Red Cross Commission to Greece where he had charge of medical relief in 1918 and 1919. He was decorated by the King of Greece in commemoration of the fine work which was accomplished under his leadership. A charter member of the American College of Surgeons, Dr. Black was quite prominent in its development in Illinois, acting as Govenor for the College for a period of several years. Invariably a follower of medical and surgical progress, he accumulated a personal library of more than 3,000 volumes of medical works, which a few years ago, he turned over to the local Passavant Hospital.

He was the author of several books, and these, with 1,000 or more manuscripts were presented to the Illinois State Historical Society. Dr. Black, always interested in medical history, had as a special hobby, the collecting of photographs of outstanding physicians, then later as secretary of the Illinois State Medical Society Committee on Archives, he centralized his efforts in procuring photographs of Illinois physicians. His large collection of many thousands of photographs was presented to the State Medical Society. Dr. Black appeared before the House of Delegates at the annual meeting some four years ago, offering the entire collection to the Society, and insisted that the collection be enlarged and housed permanently at the Illinois State Historical Society Building in Springfield. This generous offer was accepted by the House of Delegates, and efforts were then made to add many thousands of additional photographs to be sent to Black for mounting, filing and indexing. Then the



Carl Ellsworth Black, M.D.
1862 - 1946

entire collection would be taken to Springfield.

The Secretary of the Illinois State Medical Society and the Councilor for the district in which Jacksonville is located, appeared before the Morgan County Medical Society only three days before the death of Dr. Black, at which time he stated that the work of mounting and indexing the photographs was almost completed and within a short time, they would be ready for the transfer to the Illinois Historical Society building in Springfield. The officers of the state society present were given a message by Dr. Black to be transmitted to the Council.

The collection of photographs collected by Dr. Black throughout his long professional career will be known as the Carl E. Black — Illinois State Medical Society Collection. The Society will endeavor through an active permanent committee to add to the large collection, said to be the largest collection of photographs of medical men privately collected in the United States, and to aid materially in accumulating biographic material to be added to the collection and increase its historical value.

The wife of Dr. Black, formerly Bessie McLaughlin to whom he was married in 1889, died in 1942. Dr. Black had three daughters, Mrs. George Drennan and Mrs. Wallace Hembrough, both of Jacksonville, and Miss Elizabeth, who cared for her father at the family home until his death. There are two sons, Dr. Ellsworth of Jacksonville, and Kirby who resides in Peoria. Two sisters of Dr. Black, Mrs. Mark Baldwin and Miss Clara Black both reside at Duluth, Minnesota.

During his professional career of more than 58 years, Dr. Black's chief interest was in surgery, and he performed many thousands of major operations, and took great pride in relating how many technical operations he performed after his 80th birthday.

For a number of years, he has been distinguished within the Illinois State Medical Society as being the oldest living past president, and he was quite reluctant indeed, to tell how long it had been since he presided at the annual meeting during his term of office. He was quite prominent in the development of a new constitution for the society in 1902 and 1903, at which time the Council was organized.

The thousands of friends of Dr. Black in Illinois and throughout the nation will long remember this grand man of Illinois medicine, and at this time, extend their sympathy to the family at his passing.

SEPARATIONS FROM THE SERVICE

The following Illinois physicians have been separated from the service since the last issue of the Journal:

Albers, Elmer A., Lockport
Allison, Charles Jr., Kankakee
Armstrong, Robert B. Jr., Rockford
Aronoff, Joseph, Morton
Ash, Alfred S., Quincy
Ball, Orrie H. Jr., Bloomington
Barnes, Gareth B., Elign
Bates, Robert R., Joilet
Baxter, Raymond E., Bloomington
Benkendorf, Richard C., Bushnell
Bennett, David Andrew, Canton
Berman, Peter, Durand
Bower, Willis H., Galesburg
Bowman, Harold S., Jacksonville
Brott, Everel W., Lena
Carey, Gregory M., Joliet
Carey, James C., Joliet
Carlin, George W., Joliet
Carney, Thomas B., Kewanee
Christensen, Frank A., Peoria
Clark, Cliff L., Onarga
Clark, John S. Jr., Freeport
Copeland, William J., Cary
Countryman, Howard D., Rockford
Cox, Elwood H., Mt. Pulaski
Crandle, Ellis R., Carbondale
Cunningham, Glenn D., Rock Island
Daly, Anthony J., Rockford
Dean, Robert K., Peoria
Doud, Ray W., Normal
Drennan, George L., Jacksonville
Dunn, Marion F., Hinsdale
Engelbach, Hermann F., Jacksonville
Ennis, E. Harold, Springfield
Evans, Harvey A., Metropolis
Fahrner, George V., Joliet
Fair, John R., Wolf Lake
Fairshter, Alex E., Brookport
Feldman, Harold, Pekin
Finkle, John R., Plainfield
Fischer, George G., DuQuoin
Flickinger, George H., Hopedale
Foley, Charles J., Waukegan
Fox, William W., Lincoln
Freedman, Morton Jashua, Peoria
Freeman, Wendel R., Champaign
Freiheit, Harold J., Highland
Frye, Garnet M., Peoria
Gillesby, William J., Effingham
Giltner, Otis B., Sheffield

Hartman, Henry A., Kankakee
Hepner, Paul E., Danville
Hollander, John D., East St. Louis
Jacobs, Frank D., Farmington
James, David E., Belvidere
Johnson, Ira W., Noble
Kaim, Samuel Cedric, Rock Island
Keating, Donald J., Momence
Kerst, John A., Springfield
Ketterer, Francis H., Breese
Kohlstedt, Kenneth D., Springfield
Krieger, Leslie W., McHenry
Kunsch, Ladislaus J., Naperville
Lampert, Elmer G., Wheaton
Lang, Herbert, Armington
Lenth, Vincent T. J., Jacksonville
Lenz, Charles R., Springfield
Levis, William P., Springfield
Loar, Ralph Rinehart, Normal
Logsdon, Robert E., Mt. Sterling
Lowy, Howard A., Creve Coeur
Luke, Edward A., Waukegan
Madison, Burle B., Springfield
Marquis, Neal J., Sterling
Martin, Richard R., Peoria
McCulley, Robert A., Pecatonica
McCuskey, John M., Peoria
McGinnis, William T., Carbondale
McGuinness, George A., West Chicago
McMahon, John V., St. Charles
McSweeney, Wayne S., Joliet
Meagher, George B., DePue
Metro, Michael L., Alton
Moisant, Bernard E., Aurora
Montgomery, Burtis E., Harrisburg
Morgan, George E., Bloomington
Morgan, Jack A., Elgin
Mosney, Emil K., St. Charles
Munson, Fred W., Streator
Nelson, Charles A., Pekin
Newton, William H., Woodstock
Norbury, Frank G., Jacksonville
Nourie, Raymond L., Kankakee
Potter, Jacob J., Rockford
Price, Robert G., Bloomington
Raber, Paul A., Bloomington
Rathbun, G. E., Rock Island
Redmond, Ralph Newman, Sterling
Richards, Francis L., Springfield
Roane, Robert D., Carlyle
Roberts, Jos. M., Watseka
Roeder, Stuart D., Watseka
Rose, Gabriel, Kankakee
Roseborough, Albert S., Rockford
Ross, Ed. Y., Cobery
Rossiter, Donald E., Highland Park
Roth, John B., Morris
Sandberg, Kurt H., Stewardson
Schnepp, Kenneth H., Springfield
Schowengerdt, William H., Champaign
Schreiber, Adrain L., Caledonia
Schwartz, Martin L., Murphysboro
Scott, Dale F., Sterling
Siegert, Frederick W., Pana
Sinow, Sidney A., Clinton
Sonenschein, Benjamin, Chenoa
Spicer, Donald D., Paris
Trumpe, Darrell Hart, Springfield
Turner, Marion A., Christopher
Wald, Sidney I., Galesburg
Wedig, John H., Alton
Weir, John M., Decatur
Wiltrakis, George A., Alton
Wolff, Luther H., Waukegan
Yarbrough, Charles L., Cairo
Young, James M., Orion
Youngerman, William M., Champaign
Yovaish, Walter, Lockport
Ziffren, Sidney E., Rock Island

REFRESHER COURSES FOR ARMY DOCTORS

Major Gen. Norman T. Kirk, Surgeon General of the Army, announced recently that refresher training courses covering twelve weeks will be offered to doctors leaving the service in the fields of medicine, surgery and neuropsychiatry. The program will be available until June 30 at army hospitals to reserve corps, National Guard and medical corps officers scheduled to leave the service.

Such a refresher course would provide temporary duty assignment at hospital where the medical officer would have clinical work under supervision and opportunity for study of recent advances in medicine.

State Department of Public Health

SERVICES RENDERED BY A COUNTY HEALTH DEPARTMENT

RICHARD F. BOYD, M.D., M.P.H.
Chief, Division of Local Health Administration
Illinois Department of Public Health

Before the residents of any Illinois county vote on the question of establishing and maintaining their own *permanent* health department, they will undoubtedly be interested in knowing just what benefits they may expect to receive from such an organization. In describing the services rendered by a full-time county health department, I refer only to activities of a department that is both adequately staffed and adequately financed.

An adequately staffed county health department is one which has a ratio of approximately one public health nurse to every 5,000 people, one sanitation officer to every 25,000 people, one health officer to every 40,000 to 50,000 population, one health educator for every 40,000 to 50,000 population and one stenographer for every 15,000 population. To finance such a health department a budget of approximately $1.00 per capita is recommended.

In order for a health department to operate effectively, it is necessary also that the staff be adequately trained. The Health Officer, public health nurses and health educator must have a year of academic training in public health as a specialty in addition to their basic education and the sanitary engineer must be well grounded in the field of sanitation. The sanitarian, although less highly trained than the sanitary engineer, should have some academic training in the field of general sanitation.

With a full-time county health department operating in a county, one of the first improvements that residents of that area hay expect is a reduction in the incidence of communicable diseases. This decrease is brought about, in part, by careful epidemiological investigations conducted by the health officer at the outbreak of all epidemics, resulting many times in the discovery of the focus from which such epidemic started. A carrier may be found to be the focus of infection in a violent typhoid fever epidemic, or a milk handler in an outbreak of scarlet fever or streptococcus sore throat. With the focus of infection determined, measures for controlling the epidemic can be instituted promptly. Also of assistance to practicing physicians in overcoming such epidemics are the consultant services of the county health officer who is well trained in the diagnosis of communicable diseases.

The chief interest of the health officer, however, lies in the *prevention* of communicable diseases rather than in their control. By vaccination and immunization procedures many of the common communicable diseases may now be prevented, and Illinois health officers concentrate much time and effort in the promotion of effective campaigns for vaccination against smallpox and immunization against diphtheria, typhoid fever and whooping cough. With a large percentage of the people of the county immunized, these diseases soon disappear as they are unable to find a foothold among susceptible persons.

Although Illinois has witnessed a marked decrease in the incidence of smallpox and diphtheria during the past decade, the State's record with respect to these diseases is still not as good as it might be. The present incidence of smallpox and diphtheria in Illinois offers little com-

fort to one who knows that these diseases have become practically non-existent in some of the eastern states.

The public health nurse, as well as the health officer, also plays an important role in the control of communicable diseases. On request of the family physician, she visits the home in which there is a case of communicable disease and demonstrates to the family a method of isolating the patient in one room of the house. By the use of proper isolation technique, the remaining members of the household may be prevented from contracting the disease.

Tuberculosis and venereal diseases are usually considered of such great importance by health officers that separate and intensive programs are conducted in an effort to control them. The tuberculosis control program is aimed at finding early cases of the disease and providing treatment for such cases in sanatoria. By the hospitalization of patients having tuberculosis, two results are accomplished; the patient is removed from the household where there is a constant danger to those who come in contact with him, and, he is placed in the care of persons specially trained in the treatment of tuberculosis where he has the best possible opportunity for arrest of his disease.

The contacts of cases of tuberculosis are visited by public health nurses and urged to be examined to determine whether or not they are free from infection. Tuberculin testing programs followed by X-ray examination of those who react positively to the test are carried out among selected groups of individuals. By such methods, tuberculosis may be materially decreased in the county over a period of a few years.

While venereal diseases have always occupied an important part of any public health program even greater attention is being given to them at the present time because of their tendency to increase during periods of national mobilization. Every effort is made to find cases of venereal diseases and to place these patients under treatment. When contacts and sources of such cases are located, they are encouraged to be examined to determine if they are infected. Vigorous work in this field results in a decrease in the incidence of these important diseases.

Studies in regard to deaths during childbirth, which have been conducted in a number of large cities and in several rural areas of the United States, indicate too great a loss of life due to this cause. The services of a county health department tend to bring about a reduction in the number of maternal deaths within the county.

The studies in regard to maternal mortality also emphasized the fact that a large percentage of these mothers died because they failed to realize the importance of obtaining proper care during pregnancy. In counties having full-time health departments, the public health nurse may visit the homes of expectant mothers early in pregnancy to inquire as to whether these mothers have placed themselves under the care of their family physicians. If they have not already made such arrangements, they are urged to seek medical attention promptly. With the consent of the attending physician, the nurse may then make regular visits to the home, giving the mother pertinent information relative to personal hygiene and assisting her with preparations for the baby's arrival. In some of the counties in which hospital facilities are not available, nursing service is provided to the practicing physicians for home deliveries. After the birth of the baby, the public health nurse makes periodic visits during the post-partum period, demonstrating to some member of the family proper care of both mother and baby.

In counties in which health departments come into being, a reduction in the number of deaths of children during the first year of life may be expected. This program, like that of maternal hygiene, is largely within the province of the public health nurse. Through visits to homes in which there are infants, mothers are taught the proper preparation of the baby's food and methods of promoting desirable health habits in the child. The personnel of the county health department will also promote the periodic examination of well children, either in well-child conferences or in the physician's office. In this way, physical defects are discovered early, when correction is relatively easy.

The program which I have just described will automatically operate to produce healthier school children since those who have had adequate medical and dental supervision during pre-school years will enter school without remedial physical defects. However, the plan of periodic physical examinations should be carried over into the

school-age group. It is desirable that each school child have a physical examination at least three times during the first eight years of school life. It is also highly desirable that parents be present at the time this examination is made by the health officer or family physician. Defects which are discovered in the presence of parents are much more likely to be corrected than those which are brought to light in routine school examinations without the parents' presence. A still larger number of these physical defects will be corrected if visits are made into the homes by the public health nurse, calling again to the attention of the parents the need for correction of the defects by the family physician or dentist.

The personnel of the county health department also stimulate the promotion of a more healthful environment for the school child in that sanitary inspections are made of school premises, followed by recommendations to school boards with regard to the improvements necessary to provide adequate sanitary facilities, proper lighting and ventilation. Although it is not the duty of the health officer or public health nurse to engage in teaching activities, both may be of valuable assistance to the teachers in providing scientific facts on which to base the teaching of health in the schools.

Counties in which health departments are established may expect the incidence of such diseases as typhoid fever and dysentery to be decreased. Being filth diseases, sanitation officers play an important role in their control by promoting a more cleanly environment within the county. Persons for whom a municipal water supply is available are urged to make use of this facility since water which is provided by municipalities is tested at regular intervals. Families living in rural areas are assisted with the proper construction of new wells and the reconstruction of old ones so that contamination by surface water may be prevented.

In cities and villages having a municipal sewerage system, all householders are urged to take advantage of this facility, this being the most satisfactory method of disposal of human waste. People in rural areas are encouraged to dispose of such wastes either by means of septic tanks or sanitary pit-type toilets. In cities and villages having ordinances relative to the sanitation of restaurants and cafes, the personnel of the health department are available for the inspection of these establishments. The sanitation officers check to make certain that dishes are washed properly; that food is stored in such manner that it will not be contaminated by insects or rodents; that refrigeration is properly carried out; and that food which is displayed is protected from flies. The milk supply is also protected through the inspection of dairies and pasteurization plants assuring that this most important food is produced, processed and distributed in a safe manner.

The health education program is really basic to all programs of the Health Department, since the success of each program will be dependent upon an understanding of the program by the public. Because of the program of health education, one may also expect the general health level of the county to be raised because of a higher standard of personal and community hygiene. The general health information of the people is increased through the distribution of health literature; by talks before civic groups by health department personnel; through the showing of films on health subjects; and through the development of committees throughout the county to study the health problems in their own localities and to facilitate necessary improvements.

Recognition of the need for adequate local health services as provided by county health departments is evidenced by the rapid growth of these departments in this country, the first one having been established in 1911. At present, approximately half of the counties in the United States are served by county or multiple-county health departments. The need for further expansion of these services was formally recognized by the American Medical Association in a resolution passed by the House of Delegates in June, 1942, urging the complete coverage of the United States with full-time health departments.

CULTURES AS AN AID IN THE DIAGNOSIS OF GONORRHEA

The limitations of the smear of "spread" of exudate as a source of material for the laboratory diagnosis of gonorrhea have long been recognized. In acute gonorrhea in the male, and to a lesser extent in the acute disease in the female, the examination by a skilled bac-

teriologist of a specimen which has been properly taken yields quite satisfactory results. On the other hand, the smear is not a very good specimen when it is taken from patients with chronic infections. This is especially true in the case of smears collected from the female suffering from chronic gonorrhea since her specimens contain so many other bacteria which may be mistaken for gonococci. Furthermore any gonococci which may be present in her exudates are difficult to find.

It is generally agreed that a culture yields somewhat better results than a smear when the former can be made immediately after the specimen is taken. In patients treated with sulfonamide drugs a considerable proportion rapidly become asymptomatic and smears fail to reveal the presence of gonococci. Cultures on suitable media make it possible to recover gonococci, however. In other words cultures are valuable in picking up asymptomatic carriers of gonococci whether or not they have been previously treated.

All of the earlier work on gonococcus culturing was done in clinics or under conditions which made it possible to plant the exudate on culture media soon after it was obtained. Provision of a statewide service for gonococcus culturing must take into account the fact that gonococci on plain swabs die out too rapidly to withstand shipment through the mails. A number of special media have been developed designed to permit the survival of gonococci during shipment. Since other bacteria present in the exudate are apt to grow more rapidly than gonococci, most of the media contain some substance which inhibits the growth of the former. Unfortunately, the inhibiting agent is also toxic, to some extent at least, to any gonococci which may be present. It is also well known that culturing of gonococci is much more likely to succeed in an atmosphere containing about 10% CO_2. It is difficult to provide this for field cultures.

Attempts have been made to institute statewide culture services without providing facilities for preliminary incubation of the inoculated media before shipment to the state laboratory. In New York State this has been reported as being moderately successful. On the other hand, in Massachusetts it has been found that under these conditions only one-third as many positives were detected on cultures as on smears taken from the same individuals. Our experience with cultures in Illinois under these conditions has also not been encouraging.

In one state a plan has been developed which involves the distribution of special media in tubes containing a partial atmosphere of CO_2. These tubes are inoculated by the physician who takes the specimen. He then takes them to the nearest cooperating laboratory, public or private, where they are incubated for at least 18 hours and then shipped to the central state laboratory. This procedure involves a great deal of cooperation by local laboratories for which they are not permitted to charge. It would appear that if they are prepared to do such a large part of the work, they should be permitted to complete the cultures and identify the organisms isolated.

The published results of this state's experiment are not convincing. Although a considerably larger percentage of positives was obtained by culture than by smear, the latter were examined locally apparently by persons who were not considered capable of making cultures. It is well known that the more skilled the examiner, the higher the percentage of positive smear tests will be.

In any event, it does not appear that a simple, practicable procedure for culturing gonococci from specimens taken at some distance from a laboratory has yet been developed. A great deal of investigative work is being done in many laboratories, including the Division of Laboratories, of the State Department of Public Health, in the hope of finding a satisfactory method. Some of these developments appear to be promising. The cooperation of physicians interested in this problem is needed and their aid solicited in working out some of the difficulties that have been encountered.

With the advent of penicillin treatment of gonorrhea the value of cultures may well be reexamined. Based on the experience of the U. S. Army it appears that men infected with gonorrhea who are adequately treated with penicillin rarely become asymptomatic carriers. If gonococci are still present, as shown by smears and cultures the individual continues to show sufficient discharge to enable his condition to be detected clinically. If these findings are corroborated on larger scale studies including those

on infected women, it would appear that cultures may not be necessary as a criterion of cure in penicillin treated individuals.

If that should be the case, the principal value of the culture would be as an aid in the detection of chronic cases among females, especially those accused of being sources of infection. Here again an analysis of available figures suggests that a properly taken smear may yield almost as satisfactory results as a culture. The interest evoked in improvements in the laboratory diagnosis of gonorrhea by culturing has shown the necessity of proper specimens as a prerequisite of success in this type of test. It has also brought out the fact if as much attention is paid to the collection of a specimen to be smeared on a slide as for one to be cultured, the results of the two tests are not radically different.

As most of the physicians in Illinois must rely on the results of smears at the present time, it is worth repeating the advice of authorities such as Pelouze in regard to the method of collecting material and making the slides. In the case of the male patient who is suspected of having chronic gonorrhea a specimen taken following prostatic massage is recommended. Urethral exudate may be collected from the female patient on a sterile swab and smeared or spread by rolling or rubbing it over the surface of a clean glass slide. If no exudate is found at the meatus, pressure should be applied to the ducts of Skene's glands and to the urethra in order to obtain sufficient material for examination. Specimens should be obtained from the cervix with a speculum which has been inserted without the aid of a lubricant. The mucous plug must be removed from the cervix before the swab is applied to that area.

The smears on the slides must be neither too thin or too thick. If too thick, staining and decolorizing cannot be done properly: if too thin, it will be difficult to find any gonococci which may be present. Too much rubbing of the swab on the slide should be avoided. Be sure that the slides are allowed to dry by exposure to air before they are placed together. If they stick together, it is difficult to separate them and in the process of doing so the slides are often broken or the smear is rendered unsatisfactory for staining and examination.

Submission of several smears taken over a period of days or weeks may yield a positive result in a chronic case in which a single specimen has been found to be negative. This is especially true in chronic gonorrhea of the female in which the character of the secretions of the genital tract and the bacterial flora changes so greatly during the menstrual cycle.

It goes without saying that if facilities for gonococcus culturing are available, as they are in many communities in Illinois, they should be utilized to the fullest extent. In every instance, however, the smear should also be employed as it has been shown that a number of specimens which are negative on culture yield positive smears. The two methods are complementary, not exclusive or antagonistic.

We may conclude as follows: there does not appear to be a satisfactory method now available for culturing gonococci on a statewide basis; the use of penicillin in the treatment of gonorrhea may eliminate the culture as a criterion of cure; cultures should be used to supplement smears when possible; in the absence of local facilities for culturing gonococci properly taken smears, examined by a competent bacteriologist, will prove to be almost as satisfactory as a culture.

WORKING WITH LUNG IRRITANTS CAN CAUSE CHRONIC BRONCHITIS

Chronic bronchitis can be an industrial hazard if workers who come in contact with various irritants to the lungs do not observe proper precautions, according to an article in the current issue of *Hygeia*, health magazine of the American Medical Association.

Arthur S. Webb, M.D., Controller of the DuPage County (Illinois) Tuberculosis Sanatorium Board and Honorary Director of the DuPage County Tuberculosis Association, writes that "if the worker is exposed to dust that has sand particles of small enough size to breathe into his lungs, he can develop a condition known as silicosis, in which particles of sand enter the lung and eventually cause irritation and cough."

Correspondence

SUCCESSFUL STAFF MEETINGS DESCRIBED

After two years of use at Geneva Community Hospital the type of medical staff meeting to be described has proved to be successful beyond expectations. Although no originality is claimed for the idea behind the meeting it was conceived for the first time by the author for use at Geneva in January of 1945.

A subject is selected from a group suggested by the staff. Biliary tract disease can be an example. After dividing this into anatomy of the biliary tract, congenital deviations, etiology and pathology of disorders, medical and surgical diseases with diagnosis and management; one subject is assigned to each staff man until the subject is covered. Time is limited to ten minutes. After completion of presentations, questions are accepted from the floor for answering. They are listed by the secretary. Those left unanswered or those provocative of controversy are compiled.

An authority on the subject (most of our guests have been members of the faculties of medical schools in Chicago) is invited to be guest at a subsequent meeting. The questions are sent to him a week in advance. He comes prepared to offer answers or enter into the controversy. Much information is derived by all.

Illness has been about the only reason that has kept staff members or guests away from meetings.

The pleasure of the staff and the amazing attendance records prompts this report in that other hospitals might like it.

James P. Campbell, M.D.
Wheaton, Illinois

U. S. PUBLIC HEALTH SERVICE RESERVE CORPS APPOINTMENTS

Appointments to fill vacancies in the Reserve Corps of the United States Public Health Service are now being made, and examinations for Regular Corps appointments will be held in April and May, Surgeon General Thomas Parran announced recently.

Physicians, dentists, and nurses are needed immediately for duty in hospitals, in the Tuberculosis and Venereal Disease Control programs, and in other activities of the Public Health Service.

Pay and allowances, established by law, are identical with those for medical officers of the Army. All travel expenses, including travel to first station, are paid by the Service.

In announcing the recruitment campaign, Dr. Parran stated: "For the physician, the dentist, and the nurse, the Public Health Service is unique in the variety of opportunities it offers. Not only does the person have the opportunity for outstanding service to the nation in the growing field of Public Health, but the opportunities for professional growth and development are almost limitless. There is clinical work in Public Health Service hospitals throughout the country. The importance of medical research is being emphasized today more and more and in the Public Health Service, research opportunities exist in both laboratory and the field. Institutional, public health, and administrative work is offered nurses. Whether a professional person is embarking on his career, or has already elected the field in which he wishes to specialize, the Public

Health Service, I sincerely believe, offers him much that he is seeking.

Appointments to the Reserve Corps are made on a basis of review of data furnished by the applicant. Physical examination is required.

Regular Corps appointments require appearance before a Board, and a written professional examination. Dates and places for the examination will be announced shortly.

The Service pointed out that a person receiving an appointment in the Reserve Corps immediately, may, if he desires, take the examination for the Regular Corps at the time they are held.

Those interested in either immediate appointment in the Reserve Corps, or in taking the examination for the Regular Corps, should request application forms of the Surgeon General, U. S. Public Health Service, Washington, D. C., Federal Security Agency.

INTERSTATE POSTGRADUATE MEDICAL ASSOCIATION OF NORTH AMERICA

Gentlemen:

The 1946 Assembly of this Association will be held at the Public Auditorium in Cleveland, Ohio, Tuesday to Friday inclusive, October 15 to 18, 1946. Should you be in Cleveland at that time, we will be pleased to have you come in as our guest.

Arthur G. Sullivan, M.D.
Managing Director

DEPARTMENT OF PUBLIC HEALTH
SPRINGFIELD

TO: Physicians and Hospital Superintendents
FROM: Division of Maternal and Child Hygiene
RE: *PROGRAM FOR THE CARE OF PREMATURE INFANTS*

Despite immediate referral of infants delivered in distant communities, necessary travel time may delay admission of the infant to the Premature-Center by several hours. Therefore, in order to maintain at a maximum whatever advantages for survival the infant may have, the Pediatric Consultants for the Premature-Centers have outlined the following suggestions for interim care, which parallel closely the technic employed for newborn premature infants within the Premature-Center.

Procedures For Interim Care Pending Transportation

1. ADMINISTER CONTINUOUS OXYGEN (approximately 40%) and keep the infant in an atmosphere of about 90 degrees and 50% humidity. Heat beds for this purpose are available through your local health department.
2. ADMINISTER NO STIMULANTS in cases where intracranial hemorrhage is considered possible, especially in the instance of very small premature infants. If stimulants are indicated at all, inhalations of aromatic spirits of ammonia, or one grain subcutaneous doses of caffein with sodio-benzoates are recommended. ADRENALIN IS CONTRAINDICATED.
3. ADMINISTER NO ORAL FEEDINGS to the newly born premature infant; provide whatever fluids are essential subcutaneously.
4. KEEP THE PHARYNX CLEAR by suction with rubber bulb syringe as necessary. Do not employ a cotton or gauze swab in the oral passages. When indicated, for deeper aspiration, mild suction may be applied with a No. 8-10 French tracheal or soft rubber catheter *only in the hands of personnel particularly trained in this technic.*
5. USE ONLY LIGHT CLOTHING ON THE CHEST of the infant, to avoid any interference with respiration.
6. RESTRICT HANDLING of the infant to the minimum consistent with good nursing care. For procedure for referral of cases to Premature Centers see the Journal for September 1945.



Plan to Attend The Annual Meeting

Palmer House, Chicago, May 14, 15, 16

Original Articles

HEMATOLOGY
A ROUND TABLE

HOWARD ALT, M.D., STEVEN OTTO SCHWARTZ, M.D., and LOUIS LIMARZI, M.D.,
CHICAGO

Dr. Alt: We have collected a few questions beforehand. I do not know if there are any more to come up or not. If you wish to interrupt us at any time to ask a question, please do so. If we disagree with each other, we will try to give both sides of the problem.

The first question I have here is, "What are the indications for splenectomy?"

Dr. Limarzi will answer this question.

Dr. Limarzi: The conditions in which splenectomy is indicated are essential thrombocytopenic purpura, congenital or acquired hemolytic jaundice, so-called spherocytic jaundice and the early phase of Banti's disease.

It is important that when the diagnosis of thrombocytopenic purpura is made, that you are dealing with the primary or essential type. In this type there is a thrombocytopenia in the peripheral blood, while the bone marrow shows a megakaryocytic hyperplasia - the giant cells of the bone marrow that form the blood platelets. Splenectomy will result in a complete clinical cure if the marrow megakaryocytes are adequate in number. On the other hand, a megakaryocytic hypoplasia in the bone marrow offers a poor prognosis and splenectomy is of little or no value.

It is well to remember that thrombocytopenic purpura is observed in a number of secondary conditions such as leukemia and aplastic anemia. Splenectomy is contraindicated in these disorders. In the past cases of leukemia and aplastic anemia have been incorrectly diagnosed primary thrombocytopenic purpura and splenectomized with disastrous results. Often the poor results in such incorrectly diagnosed conditions have been used as an argument against advising splenectomy as a cure in true cases of thrombocytopenic purpura. Careful examination of the peripheral blood for immature cells and sternal bone marrow studies will aid in differentiating primary thrombocytopenic purpura from the secondary type in which splenectomy is always contraindicated.

The second group of cases in which splenectomy is indicated is congenital or acquired hemolytic jaundice. Here again one has to be sure he is not dealing with the many conditions that may cause a secondary type of hemolytic jaundice in which splenectomy is of little value. Detail studies of the blood such as reticulocyte count, fragility test, sperocytosis, etc., will aid in differentiating the true cases in which splenectomy results in a clinical cure from the secondary types in which splenectomy is of no value.

The third group of conditions in which splenectomy is of some value include the early stage of Banti's syndrome, thrombophlebitis of the portal and splenic vein, Felty's syndrome and in primary tumors of the spleen.

From an experimental and therapeutic point of view the spleen has been removed from cases of aplastic anemia and leukemia, but the results have been poor. Only in thrombocytopenic purpura and hemolytic jaundice have the results

Presented before the Section on Medicine, Illinois State Medical Society, 103rd Annual Meeting, May 18, 1943.

been excellent following the removal of the spleen.

Dr. Alt: Do you think the results are 100 percent successful in all cases of true idiopathic thrombocytopenic purpura?

Dr. Limarzi: In all cases where we have made the diagnosis of thrombocytopenic purpura and have removed the spleen we have not had any failures. We have been able to tell before hand what cases would respond following splenectomy and those cases that would not by the type of bone marrow observed following sternal puncture. We have always made sure that there were plenty of megakaryocytes in the bone marrow before we advised removal of the spleen. The megakaryocytes are the cells that form blood platelets, and if they are not present or are much reduced in number, obviously the removal of the spleen is of no value. So we can say that in all cases that we have diagnosed essential thrombocytopenic purpura we have had good results.

Dr. Alt: The next question is, "What are the best diagnostic findings, — clinical or laboratory, — for the diagnosis of hemolytic anemia?"

I will ask Dr. Schwartz to take up that question.

Dr. Schwartz: One of the most important things to ascertain is whether there is a familial history. Apparently hemolytic anemia becomes progressively more severe with succeeding generations and for this reason history is often unobtainable unless other members of the family are rather carefully examined.

The most sensitive test for latent hemolytic trait is the finding of an increased number of reticulocytes which are evidences, of course, of increased regeneration in the formed blood and indirectly of increased regenerative activity on the part of the marrow.

The fragility test has not been nearly as important in our hands as the finding of increased evidence of regeneration. Further important evidence is found in the increased pigment metabolism as indicated by increased amounts of bilirubin in the blood and increased amounts of urobilinogen of the urine. The spleen is in most instances considerably enlarged, the size varying almost directly in proprotion to the severity and duration of the disease.

Dr. Alt: I think the confusion that comes up with hemolytic anemia frequently is whether it is the acquired type or the familial type. There seems to be some disagreement as to the effect of splenectomy in the acquired type. Just in the last week I came across a patient with hemolytic anemia, a male of twenty-seven whose father had jaundice all his life and had a splenectomy. This boy had a hemolytic jaundice, but the fragility test was normal. The case was suggestive of familial hemolytic anemia but there was no spherocytosis.

Would you advise splenectomy in a patient with hemolytic anemia who does not have spherocytosis?

Dr. Schwartz: I think if he had the other evidences of hemolytic anemia and the process were acute in spite of negative fragility test, it might be well to advise it.

Dr. Alt: "Is administration of acid of any value in the treatment of primary anemia?" That is a question that comes up very frequently. Students are sometimes taught that acid should be given to all patients with pernicious anemia, and others are taught it is of no use. I think we can say definitely that hydrochloric acid by mouth has no effect on the anemia in a pernicious anemia patient. Of course these patients have achlorhydria. But about 20 per cent of all adults past sixty have achlorhydria and most of them get along quite well, so the acid is of no use in maintaining a red count. Liver has to be given just about as often whether you give acid or not.

I think the answer is that acid should be given for gastrointestinal disturbances possibly secondary to the achlorhydria but is of no use for the anemia.

I would like to bring up also the question of achlorhydric iron deficiency anemia in adult women. Again the question of acid therapy comes up and because it is pretty definitely established that acid is necessary for the proper absorption of iron in the diet, we frequently conclude that acid should be given as part of the therapy. Here again there is no proof that a patient will do any better with acid than without it while receiving adequate doses of inorganic iron by mouth.

With an ordinary diet it has been shown that if the diet is adjusted to an acid pH, an individual with anemia will absorb more iron than if given in an alkaline pH. There we are dealing with physiological quantities of iron in the diet, 10—15 mg. daily. When two or three hundred

milligrams of inorganic iron are given daily, the addition of acid causes no significant increase in absorption.

So again in the treatment of iron deficiency anemia with achlorhydria, the acid is not necessary.

Do you agree with that?

Dr. Limarzi: Well, we see quite a few pernicious anemia patients and many of these patients have been treated elsewhere. They always want to know if they are to take their acid or not. As far as pernicious anemia is concerned, we do not give it, of course, unless the patient has a diarrhea or something like that. But many patients seem to think that they feel better when they are taking dilute hydrochloric acid. We do not in any way prohibit them from getting it but as far as the hemopoietic effect, it does not have any.

Dr. Alt: I do not know if I understand this question: "What controls the rate of blood formation and its quality and usefulness?"

Dr. Limarzi: Who asked this question: "What controls the rate of blood formation and its quality and usefulness?"

Dr. Brown: When a person loses blood, — say a woman at the time of her periods, — at an excessive rate, what tells the hemopoietic system to step it up and put out more cells?

Dr. Limarzi: That will all depend upon the status of the hemopoietic organs. For example, there are many cases of so called aplastic anemia in which the hemopoietic organs are hyperplastic. The question comes up, what are you going to do to stimulate these bone marrows and get these cells out in the peripheral blood? Unfortunately, there is not any drug that will do it in most instances. On the other hand, if you are dealing with a microcytic anemia, iron would be indicated. In a case of pernicious anemia, we are dealing with a hyperplastic bone marrow and liver extract would be indicated. Therefore we do know that the antipernicious anemia factor found in liver extract is essentially for transformation of a megaloblastic bone marrow to a normoblastic one and that iron is needed for the maturation of the normoblasts to normal red cells. Oxygen and probably vitamins and several minerals like copper are necessary for blood formation. It is well to remember that there are many blood disorders in which none of the known anemic factors are of any value.

Dr. Brown: What is the mechanism in the body that makes more blood formation? How does the blood know when to form more cells?

Dr. Limarzi: Well, the blood itself does not form cells, Mr. Chairman; it is the blood-forming organs that form cells and just what is behind the blood-forming organs that manufacture these cells we do not know.

Dr. Schwartz: The probability is that there is a certain amount of oxygen which is apparently the optimal amount under which the bone marrow produces its cells. Anything that decreases or increases that oxygen tension by changing the oxygen-carrying capacity of the blood will act as a stimulant or a depressant. For that reason we see that in a congenital heart disease where there is an arteriovenous shunt and the oxygen-carrying capacity of the blood is lowered secondary polycythemia is a result. This seems to be in line with the idea that perhaps oxygen tension is the ultimate stimulus for blood formation.

Dr. Alt: There has been an interesting bit of research in the last six months on that point. It was shown that high oxygen tension depresses blood formation in sickle cell anemia.

The next question will be answered by Dr. Schwartz. "Give the best diagnostic findings, clinical or laboratory, for the diagnosis of pernicious anemia."

Dr. Schwartz: The one best diagnostic test for pernicious anemia is megaloblastosis of the marrow since any of the other things which we ordinarily think of as characterizing pernicious anemia may be present in other conditions, or may be absent in pernicious anemia. Of course theoretically we would like to have a macrocytic anemia with typical red cell changes, a leukopenia, granulopenia and thrombopenia, but all these things may be absent in relatively mild cases or in cases primarily with cord symptoms. By the same token, the absence of hydrochloric acid may be present in other conditions and may be absent in pernicious anemia; so that ultimately the best and only certain way to diagnose the doubtful cases is by demonstrating the typical megaloblastic changes in the bone marrow.

Dr. Alt: In an adequately treated case of pernicious anemia, the bone marrow is normal, is it

not? How low do you think the red count would have to be before the bone marrow would give a typical diagnostic pattern?

Dr. Schwartz: We have punctured the sternum in cases where the question came up whether the patient had the cord changes secondary to pernicious anemia even with blood level as high as four or four and a half million red cells and found, although not typical megaloblasts, sufficient suggestive evidence to make us believe that those were cases of pernicious anemia and who subsequently, on liver therapy, showed considerable and very significant improvement.

Dr. Limarzi: The point here is brought up that you occasionally see a megaloblastic type of pernicious anemia in pregnancy in which the peripheral blood is not macrocytic; in fact, the peripheral blood may be microcytic. A number of these cases have been seen by the doctors, and because the cell has been small, they have been given iron. These cases will not respond to iron. So that in such cases, one will have to be sure (these cases are not very common) that he is not dealing with a megaloblastic bone marrow. You must remember that although in all cases of true Addisonian pernicious anemia you get a macrocytic anemia, you do get cases of megaloblastic anemia of pregnancy in which the peripheral blood shows a small cell. Treatment consists in giving adequate amounts of liver extract.

Dr. Alt: The next question: "Are sulfa drugs contraindicated in the presence of a marked leucopenia?"

This question comes up very often. In a patient with a very severe infection and a possible agranulocytosis, one wonders whether to go ahead and give maximum doses of the sulfonamides or not. I think we are coming around more and more to the idea that these are the patients that need sulfonamides more than any other. Because the neutrophils are very low, infection spreads rapidly and is more severe.

Just a few days ago I saw a patient with a white count of 1500 with no granulocytes — she had had rather heavy x-ray therapy over the pelvis and in addition had had arsenic therapy for syphilis. Her temperature was 103° for three days. Maximum doses of sulfa drug were given and in three or four days the granulocytes started going up. The patient made an uneventful recovery even while receiving large doses of sulfonamide therapy so I do feel that sulfa drugs should be given in adequate doses. Although leukopenia can occur secondary to the administration of sulfa drugs rather early, it occurs much more commonly after a rather large amount has been given over a longer peroid, usually after seven to ten days, and after forty or fifty grams of the drug have been given.

Dr. Limarzi: I think it is true that the sulfonamides are not contraindicated because you have a leukopenia. For example, there are a lot of diseases that do have a leukopenia to which you can give all kinds of sulfonamide drugs and not affect the blood and bone marrow. We have tried over and over, experimentally, on cases of Felty's syndrome and leukemias, etc., and it has no effect whatsoever.

But you must be careful in the case that had a normal count, to whom you give sulfonamides and your count begins to drop. Here is a very important point in giving sulfonamides. We do not very often see leukopenia following sulfonamides. The most important action of the drug has been the hemolytic action and then the neutropenia second and the thrombopenia third.

In the neutropenia following sulfa medication recovery, in our experience, could be correlated with the status of the bone marrow. In those cases with the myeloid hyperplasia in the bone marrow and a monocytosis in the peripheral blood recovery, in most instances, is spontaneous. On the other hand, where the bone marrow is aplastic those cases go on and die.

Dr. Alt: Dr. Limarzi, will you answer this question?

Dr. Limarzi: The question here is: "What is the relationship of the macrocytic anemia following toxic sulfa therapy to the liver?"

Well, if you get a hemolytic anemia, for example, following the sulfonamide drugs, you get a reticulocytosis. The reticulocyte is a larger cell and you get a pseudomacrocytosis. Just what relation that has to the liver I do not know definitely but I know a number of years ago Dr. Paul did some work on the effects of sulfonamide and he showed that in the early effect of sulfonamide you do get a macrocytosis with very few reticulocytes, and that was the first and early indication of sulfonamide toxicity.

On the other hand, of course if you give plenty of sulfonamide and get a hemolytic anemia, you

will get a macrocytic anemia which is due to reticulocytosis. What relation that has to the liver I am not certain.

Dr. Alt: Dr. Schwartz has a question.

Dr. Schwartz: "How do you differentiate between agranulocytosis and the aleukemic phase of lymphatic leukemia?"

The points of differentiation are that in agranulocytosis the red count is unchanged; there is a history of having taken some form of pyramidon or amino-pyrine or some related drug, the onset is very acute without any prodromal symptoms, and no other changes are present in the blood such as thrombopenia, which would be present in a chronic form of leukemia such as lymphatic leukemia.

The difficulty of course is that lymphatic leukemia might also be acute and under such circumstances the symptoms would not be of very long duration. But here we still expect to find some peripheral lymphadenopathy. The ultimate differentiation revolves around the findings in the marrow where, with the lymphatic leukemia, there is invasion or displacement by lymphoid cells, whereas in the agranulocytosis there is the typical crowding of the marrow with granulocytes with an absence of more mature forms.

Dr. Alt: I have two questions here that are somewhat inter-related and we might say a word about these because I think they are of considerable current interest. One is, "What is the time interval between irradiation in myelogenous leukemia and the maximum therapeutic response?" The second one is, "What is definitely known concerning results of the use of radioactive phosphorus in the leukemias?"

As to the first question, it occurred to me some five or six years ago that rather than treat chronic myelogenous leukemia with very large doses of x-ray every second or third day until the white count comes down from two or three hundred thousand to ten thousand and then sending the patient away and losing contact with him, it would be better to give small doses at regular intervals so that a continuous effect would be exerted on the bone marrow. At first we gave x-ray over the torso, but later used total irradiation exclusively. We found that the average patient with myelogenous leukemia could take thirty to thirty-five roentgen units without reaction.

These patients have been followed now for a number of years and it has been found that by giving treatments at intervals of one to three months, it is possible to keep the white count in the range of 15,000 to 30,000. Contrary to what the books say, we pay considerable attention to the white count in treating the patient with chronic myelogenic leukemia.

When the white count starts going up and getting above twenty-five to fifty thousand, there is usually an increase in size of the spleen, whereas if the white count is kept in the range of ten to twenty thousand, the spleen usually remains small over a considerable period of time. Murphy advocated this method of treatment in an article in the J.A.M.A. about a year ago.

We are not claiming that life is prolonged by this method of treatment but the patients feel fairly well and are able to work every day for long periods. Those that do not like to come in continually for x-ray therapy are given small doses of Fowler's solution for a period of three weeks at a time. If the Fowler's is continued over a longer period, toxic effects are quite common. A rest period of six weeks is allowed between courses of Fowler's solution. Total irradiation is given during this time if indicated.

Several years ago, shortly after the cyclotron was invented, radioactive phosphorus was used in the treatment of leukemia. It has stood the test of time and is extremely effective in the treatment of this disease. Those that have used it do not claim that it does much more than x-ray treatment in the treatment of chronic leukemia. However, it is a more logical method of giving irradiation.

The hemopoietic cells store radioactive phosphorus selectively. By taking a dose every three to six days, patients are under continuous therapy, which is somewhat analogous to the way we are treating them with x-ray, i.e. giving a small dose at set intervals. Radioactive phosphorus has also proved very effective in the treatment of polycythemia vera.

So many relatives of patients with acute leukemia come to the doctor and want to know about the use of radioactive phosphorus. Dr. Warren of Boston and several others have written about the treatment of leukemia with radioactive

phosphorus, and I think there is a general agreement now that in most cases the treatment is harmful. It has no more to offer than x-ray therapy which we know seldom helps in the acute and subacute leukemias.

It is very difficult to get radioactive phosphorus as there are important uses for the cyclotron in the war effort. Just about the time we were to receive some radioactive phosphorus, the Pearl Harbor attack came and shipment was stopped.

Dr. Limarzi: We have been using arsenic. It seems that doctors have forgotten about Fowler's solution in the treatment of myeloid leukemia. We have used it in several cases and found it does work, but we eventually have to come back to the x-ray treatment in chronic myeloid leukemia.

In lymphatic type of leukemia, we do not like to give x-ray treatment unless it is absolutely necessary because eventually you get to a stage in this disease in which the process becomes x-ray resistant. The chronic lymphocytic type of leukemia should be differentiated from the acute small cell type of leukemia. The latter may be confused with the chronic small cell type of lymphatic leukemia. X-ray is contraindicated in the acute leukemia.

There is not much more to add to the treatment of leukemia at the present time.

Dr. Schwartz: I am on quite the other side of the fence from where Dr. Alt is regarding the treatment of leukemias. I suppose my experience happens to be colored by the type of patients we see at the Cook County Hospital. At County unfortunately we see the patients who have been previously treated by other doctors and we get them when there is not anything else that can be done for them. In the last two or two and a half years, we have practically abandoned x-ray almost entirely except as a means of very last resort. We nurse our patients along with transfusions, with Fowler's and anything else we happen to think of or can get our hands on, just as long as we can stave off using x-ray. This we use only in the final phase where we feel there is nothing else that can possibly be done.

Looking back over our results, I do not think they are any better than Dr. Alt's because our patients die, too, but we seem to be able to maintain them without x-ray in as good a state of health, starting with a poorer quality of patient in the beginning, than we ordinarily do in private practice.

We have gotten extremely conservative. Of course it will be a few more years before we can really go back over our results and see whether in the long run our treatment gives us results comparable with Dr. Alt's.

Dr. Limarzi: There is a question here: "What are the types of anemia that may occur during pregnancy?"

I covered that, I think, in saying that it is well to remember that during pregnancy you have three types of anemia. You get the so-called physiological anemia of pregnancy in which the anemia is normocytic in type and that type of anemia will take care of itself following delivery of the child. The second type of anemia is the iron deficiency anemia that occurs during pregnancy. And the third type is the type that I said a few words about before, the so-called pernicious anemia of pregnancy.

It is well to remember that in the pernicious anemia of pregnancy the anemia may be microcytic in type rather than macrocytic in character. The diagnosis can be cleared up by bone marrow examination which will reveal a megaloblastic type of erythropoiesis in spite of the microcytosis in the peripheral blood. Iron treatment is of no value in such cases. These cases must be treated with adequate amounts of liver extract. Complete recovery follows the delivery of the child.

Dr. Alt: Do you see pregnant women with a mild macrocytic anemia due to protein deficiency? Dr. Bethel described this syndrome several years ago. I think he found that 12 per cent of pregnant women showed this phenomenon.

Dr. Limarzi: We have not seen that very frequently. Most of our anemias have been so-called normocytic anemias. As far as the treatment is concerned, in dispensary patients it is very hard to follow the treatment, but we have never had that high an incidence of macrocytic anemia that occurred during pregnancy. Have you, Dr. Schwartz? Have you seen macrocytic anemia occurring in pregnancy?

Dr. Schwartz: We see them so seldom that when we do, we get very excited but usually they

turn out to be young cases of pernicious anemia.

Dr. Limarzi: The so-called pernicious anemia of pregnancy usually takes care of itself following delivery. We followed a case for almost five years who had a pernicious anemia of pregnancy, and following delivery of the child she has never required any liver extract.

In both of the cases, we have seen plenty of acid in their stomachs, differentiating them from the true Addisonian type of pernicious anemia.

Dr. Alt: We have covered all of the questions that have come up. I wonder if there are questions anyone would like to ask from the floor. If not, the round table is concluded.

FUNCTIONAL NERVOUS DISORDERS

S. N. Clark, M.D.
JACKSONVILLE

The purpose of this paper is to offer a brief discussion of an obscure but extremely important subject; viz., the functional nervous disorders. Before consideration is given to this particular topic a few broad statements are offered with the aims of showing the importance of the disorders and of orienting ourselves in respect to the place they occupy in the field of medicine.

We could not live without the nervous system. The same statement could be made in regard to the other important functional units of the body, but one might add that it is only the nervous system that makes possible an awareness of living without which one might as well be dead.

Both World Wars have served to focus attention on disorders of the nervous system, as well as on other aspects of medicine.

Bennett[1] states that in drafting 10 million men, over a million were rejected because of neuropsychiatric handicaps although most of these individuals had been making fairly satisfactory adjustments in civilian life. Bennett adds that of all casualities, neuropsychiatric disabilities have constituted about a third of the entire number.

Major S. A. Sandler[2] states that in the first World War each psychiatric casualty cost the government $30,000.

A few years ago Neil Dayton[3] estimated that of the approximately 1,000,000 hospital beds in the United States, about half were in psychiatric wards or hospitals. This does not mean that there are as many psychiatric cases during a year as there are of all other hospital cases combined since whereas the psychiatric bed takes care of about 1.3 cases during a year the general hospital bed is used by 23 different cases during the same period. The disparity is, of course, due to the longer duration of nervous illness and to the large number of chronic psychiatric cases many of whom reside in hospitals for years. Yet the fact that a patient may suffer from a mental disorder for years lends greater, and not less importance to the subject of the neuropsychiatric disturbances. Then too, we should remember that of the total number who display neurotic symptoms by far the greater proportion are not in hospitals.

The War has not resulted in the discovery of new types of nervous disorder, but has served to bring into clearer focus some of the functional psychiatric disturbances. One has to avoid dogmatism in speaking of the cause of mental diseases, but ideas about the subject are becoming more clear as time passes and both wars have aided in this regard. I submit that this is the most important factor in the study of psychiatry.

Obviously only a brief survey of the subject of etiology of mental disorders can be given in this paper. Perhaps it is well to start with an abreviated classification which divides the psychiatric disturbances into 1. Toxic, 2. Organic, and 3. Functional (or Psychogenic).

The toxic psychoses may be divided into exogenous; those due to agents taken into the body such as alcohol and the narcotics, and the endogenous due to infectious conditions. These may involve the brain structure directly in an inflamatory condition, e.g. encephalitis, or cause a delirious-like condition in which the brain cells are not the seat of any very obvious change.

The organic psychoses occur as a result of actual destruction of brain cells. One thinks of senile dementia, cerebral hemorrhage or thrombosis, brain tumor, and numerous other conditions. A number of such illnesses as some of the alcoholic psychoses, syphilitic meningo-encephalitis (paresis) and encephalitis of other types may begin as toxic or infectious conditions, but

Read before the Morgan County Medical Society, September 13, 1945.

end by destroying the nervous elements thus producing organic disorders.

I have given a classification which, although oversimplified, permits a comparison with medical conditions in general. We meet toxic and organic diseases in fields outside of psychiatry, but when the functional (i.e. psychogenic) disorders are considered we find something which non-psychiatric fields do not cover. It is true, of course, that mental cases may present some symptoms similar to those found in general medicine. On the other hand, infectious, organic, traumatic and deficiency state diseases may well bring into being latent neurotic or psychiatric manifestations. Yet, basically, the etiologic factor of the functional neuroses, and presumably of the so-called functional psychoses, differs from that found in the ordinary medical or surgical condition. White and Jelliffe[4] have stated that whereas; "Bodily disease is the result of conflict between the individual and nature, the neuroses are the result of conflict between the individual and society."

How then does the neurotic get that way. First, we may visualize the development of the ordinary individual. He is born with more or less potential stability and immediately and until the day of his death, is presented with a succession of situations with which he must cope.

The question might be asked, "Why must we cope with situations." The answer lies in the fact that there are drives, innate or developed within us, that need be gratified in order that we derive satisfaction rather than dissatisfaction. The sensuous desires are well known but in addition we wish to be well thought of by others, we want money, clothing, position, etc. We want particularly to measure up to those standards which we have more or less unconsciously adopted from among the many standards which exist.

If it were possible to gratify all of our wishes without effort we might well avoid all the neuroses and it is probable that we should cease to advance. This is not to say that neuroses are worth while but merely that they are one of the by-products of a life of stress which we can not avoid. That is to say, we cannot avoid stress and at least some of us, have not yet learned to avoid the neuroses.

A very definite part of life is to evade the hazards which gratification may present. If a youth sets his heart on standing first in the class and then fails to do so, his disappointment will be in direct proportion to his ambition to succeed. Success along particular lines may be possible only if one takes a chance in being thwarted or even disgraced. He may succeed at the cost of scruples which he cannot overcome, thus laying the ground work for conflict.

Some situations will be simple and some complex. There will be pleasant experiences and many that are disagreeable, threatening or actually painful. If the individual is fortunate, the situations will not be too difficult for him to cope with and his training by parents, relatives, teachers and playmates do much, either to help him, or to prevent him from learning to adapt. In the latter instance he is not made more ready for the next experience but less so. In this case, he may not face his next problem frankly, but resort to some of the unhealthy modes of reaction, e.g. anxiety, tantrum, professed bodily ailment, day dreaming, resentment or some other behavior which helps him to evade the consequences of meeting the situation squarely. His evasion may relieve him temporarily but obviously fails to train him to meet future difficulties, and it does not make for a stable and cheerful make-up since there is apt to be a vague sense of having failed to measure up to the responsibility which his age and position demand of him whereas, meeting a situation squarely leaves a sense of satisfaction.

I have spoken of the stress of meeting a difficult situation. This must be considered as a relative matter. I mean by this that a child or youth who has been fortunate in being permitted to solve his problems as advancing age brings increasing complexities, finds the next situation not too difficult. A child who has not met past problems squarely and frankly is not so well able to deal with present situations satisfactorily and may evade them. In this way a habit of harmful reactions develops which in time may constitute a neurosis.

A very simple example might be that of two school boys called upon to deliver addresses to a group. One finds the task easy because he has met similar but smaller tasks in the past. The other has evaded such efforts previously and now may not be able to dodge this one except

by developing an alleged illness on account of which he takes to bed, thereby saving himself from the ordeal. The example given is warranted unless one takes it too literally since I suspect most school children are now trained so that speaking before a group is not too difficult.

There is one feature in such reactions that merits careful consideration. We are prone to think that we clearly perceive all of the motives for our actions. This would indicate an ability to think objectively which a little consideration will demonstrate is not the case. In the illustration given the child might consciously fake an illness (malingering) but might also be convinced that he really was too ill to do the task from which he shrank (psychoneurotic reaction).

It is difficult to outline the development of personality since every experience, and each moment of every experience, has its influence on the pattern of the make-up of the child.

There is such an infinite number and variety of experiences that no two individuals develop quite the same make-up and no one person always behaves just the same in similar situations.

No one always reacts in an entirely adequate manner. The world is not divided into two groups; those who react adequately and those who manifest psychoneurotic symptoms. All of us behave occasionally, at least in small measure, as a psychoneurotic would do. When the need for performing a difficult task seems not worth while, or if the situation is very much more complex than any we have faced hitherto, or when we are fatigued or weakened, some of the symptoms of neurasthenia, hysteria, anxiety state, etc., may develop. At such time the degree of control of feelings, and ability to think objectively, which have been developed in the past make it more or less possible to regain a sane point of view and overcome the psychoneurotic tendencies.

Many different habits of reaction are formed. Some of these favor future well-being and some do not We are not yet wise enough always to know whether we are doing one thing or the other but gradually more is known in regard to the matter.

It seems clear that the habit of a parent to react to situations by becoming anxious or suspicious may inculcate in the child a tendency to react in a manner similar to that of the parent. An overly protective or indulgent parent does not aid the child to develop self-reliance and self-control.

The work done in recent years relating to the development of psychoneurotic-like reactions in animals suggests a fruitful field of research.

Some of the results of this work indicate:

1. That it is as easy to develop a harmful type of reaction as one that is beneficial if one sets out to do so. The human does not always consciously try to develop helpful mental habits but is more or less led to do so by what has succeeded in the past and is now favored by custom, and by a vague agreement as to the best way of getting along in a civilized community.

2. That a habit of reaction once formed is not easily changed.

3. That even in the lower animals the same training does not result in the same degree or kind of symptoms, in different animals, even in those of the same age and species.

4. That the psychoneurotic-like symptoms; restlessness, fear, incoordination, trembling, increase of heart action, etc., are brought about by an alteration in situations such as prevent established reactions. The animal is trained to expect a certain sequence of events and then that sequence is interrupted. The sequence that is expected does not occur. The animal is confused and thwarted.

Here one sees symptoms developing directly as a result of meeting a situation purposely made difficult, and not due to physical factors as this term is commonly used. It is true that physical changes occur, since the functioning of the nervous system is a part of a reaction of the whole individual, the autonomic system particularly being associated with changes in respiration, the cardiovascular mechanism, secretion, etc.

In the human we see the development of psychoneurotic symptoms when the individual is confused and thwarted but whereas in the experimental animal interruption of most any kind of established action is apt to lead to disorder of function, the human is prone to show such symptoms when urge, ambition or other drive runs counter to fear, conscience or other inhibitory factor. Thus a woman who has not developed the interest or energy to care adequately for her children unconsciously makes more of intercurrent illnesses, menopause, etc., than an-

other who had developed a mature attitude which is satisfied only by a willingness to sacrifice to the limit of her strength.

There are two points to be stressed here. The first is that there is a conflict. One part of the psyche tends toward one type of reaction, viz., the attention to, and sacrifice for, the children in accordance with what the mother knows to be the approved procedure. But there is also a desire not to sacrifice for the children because this means effort and the denial of doing other things instead. The mother may be able to solve the problem by the assumption of illness. If she cared nothing at all for the welfare of her children or for the approval of society there would be no conflict and no neurosis.

The other point is that the conflict is not a conscious one. This is not easily accepted by many. In an earlier paragraph reference was made to the fact that a little consideration would indicate that we are not always objective. We are swayed by personal bias. Among those of us who have at times foregone some gathering or other activity because of illness isn't it possible that when the activity was the more desirable the tendency to play down our symptoms became more marked, and vice versa. True, most of such reactions are frankly appreciated for what they are but occasionally they are not frank but are unconscious efforts to grasp that which we want, or to avoid an unpleasant situation.

With the foregoing in mind one understands the statement of Thomas[5] when he refers to "the generally accepted concept that a psychoneourosis is a nervous disorder dependent on complicated mechanisms of the mind involving unconsicous conflicts. . . . "

It should be emphasized that one cannot resort to such reactions, or decide against invoking them, as whim dictates. That is the reason for giving some space to the development of the child as was done in the forepart of this paper.

I do not want to say too much of the war experience since that had best be left for someone who has had first hand knowledge of the subject. Yet some of the statements of army and navy physicians are applicable to peace time as well as war conditions.

Sandler states that, "It is believed that the neurosis in the soldier is a recapitulation of his emotional insecurity and exaggerated dependence, which was a characteristic of the individual soldier's infancy and childhood."

Combat may precipitate a nervous disorder but Schwab and Rochester[6] state that those psychoneurotics with combat-precipitated neuroses showed less pre-enlistment instability than did the group with psychoneuroses developing in non combat areas in the rear.

This paper has been concerned with etiology rather than treatment but a brief reference to the subject is worth while. I will pass over the therapy of the established case of psychoneurosis except to say that the experience of the psychiatrists in our armed forces adds a brilliant chapter to the subject.

Prevention is an even more important angle and I may quote the following from Blain, Hoch and Ryan[7]. "Prevention of emotional illness is aided by an understanding of one's self, the frank facing of abilities and disabilities, acceptance of unalterable situations, good physical health, and adequate and satisfying outlets for the emotions and abilities. Prevention is aided by adhering to a daily schedule which should include work (purposive effort), rest, sleep, physical exercise, relaxation and companionship. These must bear proper relation to each other and be checked frequently. A philosophical attitude helps."

One may add to the foregoing statement that all this must be done without training the subject to be self-conscious of his mental reactions. In fact such pronouncement must become a common basis for living and not a mere procession of words.

A helpful point of view is to regard the various psychoneurotic manifestations as indications that the patient has failed to mature. He does not take a broad and objective point of view, he does not develop control over his emotions, and his reactions are predicated on the more immediate aspects of a situation rather than the larger and more remote consequences of his behavior. Briefly, the patient regresses to an immature type of attitude and behavior.

There is an opprobrium felt toward the psychoneurotic which is not apt to change the present situation since it places the patient on the defensive. If, in time, the concensus of opinion is that all psychoneurotic behavior is immature

one can hope for a definite change for the better. Even though the conflict involved be more or less unconscious, the behavior which results will be less tolerated by the patient himself if he feels it marks him as one who has not been courageous enough to grow up.

REFERENCES

1. "War Nerves", A. E. Bennett; Dis. Nervous System. 6: 43-48, Feb. 1945.
2. "The Army and the Maladjusted Soldier", Major S. A. Sandler, M.C., AUS. Mil. Surgeon, 96: 89-93, Jan. 1945.
3. "New Facts on Mental Disorders", Neil Dayton. C. C. Thomas, 1940.
4. "The Modern Treatment of Nervous and Mental Diseases", White & Jelliffe, Lea & Febiger, P. 334, 1913.
5. "The Use of the Term Psychoneurosis", Lt. Col. Jackson M. Thomas, M.C., AUS, New England Journal of Medicine, February, 1945.
6. "Relationship of Stress, Breakdown, Instability & Recovery in Men with Combat & with Noncombat Neuroses, Com. R. S. Schwab, USNR, and Lt. Com. H. Rochester, M.C., USN War Medicine, 7: 12-18, Jan. 1945.
7. "A Course in Psychological First Aid and Prevention", Daniel Blain, Paul Hoch and V. G. Ryan, Am. Jr. of Psychiatry. Vol. 101, No. 5, P. 629, March, 1945.

PERIANAL URTICARIA

CHARLES J. DRUECK SR., M.D., F.A.C.S.*
CHICAGO

All too often an inconstant itching disturbance about the anus is considered an essential pruritus ani and dismissed with a prescription for a soothing ointment without the thought that it may be urticaria or angioneurotic edema. Urticaria, hives or nettle rash as it is variously called is one of the frequent but evanescent itching affections of the genitals and anus which may be mistaken for some other type of dermatosis because its varying degree of itching, tingling or smarting are representative of all pruritic lesions and if the characteristic wheals are absent at the time of examination there may be no evidence of any disorder. However there is usually a clear history of an eruption which comes and goes.

Symptoms: About the anus there are two types of urticaria; the acute form which is commonly due to some disturbance of the upper intestinal tract by an irritating ingested material, and the chronic or recurrent type which may be neurogenic or often is of undiscoverable origin. Both types are characterized by the eruption of wheals which are changeable in form, distribution and color. They are evanescent, usually existing for only a short time, but new bullae may develop as the older ones disappear. On the labia in women and about the anus in both sexes they may appear as circular welts the size of a coffee bean or the finger nail. More frequently they appear as linear elevations an eighth of an inch wide and radiating out from the anus or fourchette an inch or more. The lesions are blanche white or rosy-red and bordered by a hyperemic areola. There may be but one or two bullae or there may be several.

Patients are quite vague in describing the subjective sensations, probably because or the variability of sensitiveness of individuals. One person may speak of an itching, burning, crawling or pricking sensation, and others of the swelling and soreness of the parts, but all remark that the attack comes on suddenly with or without apparent cause and as promptly disappears without leaving any after effects other than the scratch marks. An acute attack following indiscretions in eating or drinking will last but a few days.

The chronic or recurrent form and the neurogenic type which may follow nervous strain or an hysterical outburst may be characterized by repeated development of new lesions. If the wheals become hemorrhagic their color changes to purple. Such attack may last for months or years. The angioneurotic type is often associated with confusing sharp abdominal pains resembling intestinal obstruction, appendicitis, volvulus or strangulated hernia. The hysterical variety may be accompanied by sensory disturbances but not by gastrointestinal attacks.

Etiology: Only by a careful history including a review of all etiologic factors is a diagnosis sometimes possible. The urticarial wheal is a reaction in the skin produced by a toxic substance acting upon the vaso-motor nerve system. The irritant may arise from without or be produced reflexly within the body by a visceral irritant of the digestive or urinary tracts. This may be so slight a shock as undressing and getting warm in bed in certain sensitized individuals.

1. External contacts which may be causes are toilet powders and waters, soaps and other substances used in enemas, and chemicals used as contraceptives and vaginal douches.

2. Ingested foods such as eggs, cheese, pork, sausage, fish, lobster, clams, caviar, strawberries, oatmeal, pickles, nuts, chocolate, canned fruits, meats or vegetables. Any article of diet that is

*Died June 30, 1945

indigestible to that particular individual may provoke an attack. The hypersensitiveness on the part of an individual to certain foods may be inherited or acquired. Acute urticaria may also be due to toxic substances developed by decomposition in foods. Intestinal parasites, through their action on the ingested foods are said to produce urticaria.

3. Many drugs may cause urticaria. Among these are quinine, codeine, aspirin, the salicylates, coal tar products and barbital compounds, balsam and turpentine. The local application of any of these in lotions or ointments may induce urticaria.

4. Psychic disturbances such as fear, anger, remorse and shame may produce urticaria sometimes very localized.

5. Systemic diseases such as malaria, hepatic disorders, and prurigo are associated with urticaria.

6. Disturbances of the glands of internal secretion, especially the thyroid and ovary quite occasionally are causative factors. Many women with menstrual irregularities suffer with perineal pruritus and urticaria during their menstrual tension.

7. Bites of lice, stings of mosquitoes, fleas, bed bugs and caterpillars may produce just as definite a welt and or welts as do ants, wasps and bees. existing in the large mental institution felt the

8. Foci of infection sometimes are important.

Pathology: The urticarial wheal is a circumscribed edema of the corium due to a toxin either circulating in the blood or deposited locally and acting on the vessel walls.

Diagnosis: The diagnosis of perianal or perineal urticaria may be quite difficult because of the rapidity or evolution of the lesions, their ephemeral character, and the peculiar sensations they produce. Not infrequently the diagnosis must be made from the history and the possible relics of the disorder, when at the time of examination no active lesions are present.

Treatment: The first indication obviously is diligent search for and removal of the cause when found. This includes a thorough study of the nervous system as regards any states inherited or acquired. Examination of the urine for evidences of imperfect elimination is very important. A minute physical examination of the patient and his history, particularly in regard to the character of food, drink, and medicine taken, his habits of living, his occupation, clothing and mental state.

Acute cases should receive a brisk cathartic to empty the stomach and bowels of toxic material to be followed with a light diet, of about one half his usual portions, for several days. During this time sodium or magnesium salts or cathartic mineral waters should be given.

The alkaline bath, which contains sodium carbonate, sodium biborate or magnesium sulphate in strength of 6 ounces to 30 gallons of water is beneficial. Sometimes a demulcent bath, made by adding starch, gelatine or bran acts well.

Chronic and angioneurotic urticaria is very difficult and unsatisfactory of treatment. Where anemia and nervousness are evident iron, strychnine and a high calcium diet are indicated.

HIGH — CALCIUM DIET

115 Carbohydrates, 80 Grams Protein, Fat 70, Calories 1,410

Food	Gram Weight	Household measure
Cereal (cooked)		
Bread (whole grain)	45	1½ slices
Butter	30	3 squares
Salad dressing with oil		
Milk (skimmed)	1000	5 glasses or 1 quart
Cream, 20%	15	1 tablespoon
Meat (lean)	120	2 servings (4 ounces)
Bacon	10	2 slices crisp
Egg	50	1
Vegetables 3%	300	3 servings (1½ cup)
Vegetables 6%	100	1 serving (½ cup)
Fruit 5-10%	300	3 servings

This may be supplemented with calcium gluconate gr. 15 three times daily, parathyroid, viosterol or peptone. The condition is definitely an allergy but attempts to desensitize the individual rarely are successful. Autoserotherapy has seemed to accomplish results in a few cases.

An antipruritic lotion that I have found effective though tedious to make consists of four ounces of corn starch mixed with cold water to form a paste is then boiled in one quart of boric acid solution until reduced to one pint. As boiling is completed one dram (4.) of zinc oxide and two drams (8) of glycerine are added. The mixture is allowed to cool slowly. When applied to irritated surfaces it gives prompt relief.

TREATMENT OF THE CONVULSIVE STATE AT THE ILLINOIS SECURITY HOSPITAL

Alex J. Arieff, M.D.
CHICAGO

This is a preliminary report on the therapy of the Convulsive State at the Illinois Security Hospital. In a previous report, it was found that epileptic patients are subject to psychiatric disorders like any other group of patients. In the psychic sphere, except for overt psychoses, epileptic patients are subject to psychic equivalents, confusional periods or fluctuations in their consciousness preceding, concurrent or following an actual seizure. Too often the diagnosis of epileptic deterioration or epileptic psychosis is made when the actual condition may be a part of a seizure. This ofttimes disuades therapy.

In extramural practice, these psychic alterations are usually benign and of short duration, but many times the episodes may be prolonged and cause behavior disturbances so that the individual's action is thought to be due to an actual primary psychosis.

Because the epileptic patients at the Illinois Security Hospital are subject to such antisocial behavior disturbances necessitating their incarceration, it was thought of interest to report results of intensive therapy.

From the Department of Nervous and Mental Diseases, Northwesten University Medical School, and the Department of Public Welfare of Illinois.

Altogether there are twenty-one patients suffering from epilepsy who are incarcerated. The reason for their commitment at Illinois Security was that, in eighteen cases, they were transfers from other state institutions — Elgin, Manteno, Anna, Lincoln, Kankakee, because of uncontrollable behavior; one was committed because of murder; one because of crime against children, and the other because of assaultive behavior in society. The reason for transfer usually was due to the violent convulsive episode and assaultive, destructive or combative behavior associated with or without spells. In one case, this latter behavior caused skull fracture and death of another patient.

From a diagnostic view, there were eight patients with psychoses, of which four were paranoid states with deterioration, and four were schizophrenic in type. Two were mental defectives; six organic brain disease (one due to trauma; one due to encephalitis; one meningovascular syphilis, and three due to chronic alcoholism). Four were classified confusional states and one, a constitutional psychopathic state. Deterioration clinically was present in eleven of these patients, or approximately 50%. Ideas of persecution are quite common in the whole group because of spells followed by confusion and lack of insight.

The type of seizure was major in all twenty-one cases. In fifteen there were also minor and equivalent states. In all the cases, in addition, there were behavior disturbances to a lesser or severe degree, consisting of assaultive, combative, and destructive impulses. In one patient, feigned spells occurred in addition to his usual ones.

The range of age varied from 24-73, with a median of 41. The onset of spells varied from 1-39 years of age, with a median of 17. The duration ranged from 1-60, with a median of 20 years.

The average stay in institution was nine years with a range of from one to thirty-two years. The frequency of seizures ranged from two a month to one hundred per month. The care of these patients because of frequent seizures and injuries is quite a problem outside of their behavior.

Treatment of epilepsy in general is that of the seizure phase and then measures to protect pa-

tient from the hazards of a seizure and also to protect society from the latter. In this group incarceration was necessary to protect society. The next step is treatment of the convulsive state so that the patient may be able to make an adjustment and, secondarily, prevent the antisocial behavior resulting from seizures or replacing them.

From the scanty records, it was felt that even though these patients have for the most part spent years in institutions, they had not had the benefit of intensive therapy. An attempt at therapy was felt to be worthwhile.

There was no correlation between duration of spells and the results of therapy. In the patients with a remission, the average duration was 26 years and the range from 1-60, except for one, the range being 8-60. The duration of spells was 1, 8, 13, 20, 40, 45, and 60 years.

RESULTS OF THERAPY

Patients were observed over a period of only six months. Remission of all spells of from 3-6 months occurred in six patients. Behavior improved coincidentally except in one case. In twelve patients, improvement occurred in that remission of two months occurred in four and spells decreased in number up to 90% of the previous number. The symptoms in the actual psychoses remained unchanged.

In one patient therapy seemed to have little effect. Since practically all these patients were behavior problems, the analysis is important. Behavior was considered good in two patients and improved in seventeen of the twenty-one. Behavior was the same in two patients. This behavior evaluation was determined by interviewing the attendants on the patients' wards. The patients' attitudes were definitely improved. By decreasing the confusional incidents, cooperative behavior was more likely to occur.

Five patients were treated with phenobarbital alone. Three were treated with dilantin and phenobarbital; eight with sodium bromide, and phenobarbital; three with dilantin and sodium bromide; and two with a combination of bromide, phenobarbital and dilantin. One received rabellon in addition to phenobarbital. Three patients were then taken off dilantin after it was found to be ineffective. Dilantin did not have any superior effects in helping behavior disturbances.

CONCLUSIONS

1. Remission of all spells occurred; in six of twenty-one patients treated with sodium bromide, phenobarbital and dilantin. Four showed remission of two months and then exacerbation.

2. In addition, eight patients' spells decreased in frequency.

3. Behavior disturbances were markedly improved in the majority of patients.

In closing, I wish to express my thanks to the personnel of the hospital for their cooperation.

SURFACE DEFECTS OF SKIN: TREATMENT BY CONTROLLED EXFOLIATION

Joseph C. Urkov, M.D.
CHICAGO

The purpose of this paper is to call attention to the possibilities for treatment of surface defects of the skin by means of superficial or deep exfoliation, and to outline standardized technics for such treatment.

No physician can check his patient files without noting case after case of persons who bear the disfiguring stigmata of acne vulgaris, chickenpox, and smallpox; whose skins are blemished by various pigmentations, keratotic patches, hypertrophied scars, large pores, and blackheads; or who have sought recourse in "face-lifting" to remove the deep wrinkles left by emotional strain or weight loss.

Ordinarily the physician dismisses such cases as hopeless if they are severe; if they are of moderate degree he considers the disfigurement unimportant. Even when he is referred to a dermatologist or plastic surgeon such a patient is too often either dismissed without remedy or treated by radical or ineffective methods. And all too frequently the patient seeks a solution for his problem from the unscrupulous quack who takes the fortune without restoring the face.

No blemish can be dismissed lightly as "unimportant" simply because it does not endanger the life of the patient, even if it has not obviously affected social and economic equilibrium. Skin defects may seriously distort the patient's

human relationships, not only because they affect the observer but because they destroy the individual's confidence in himself. Such personal and professional handicaps could in most instances be averted or removed by proper treatment.

The production of exfoliation of the superficial skin layers is of course a time-honored practice in dermatology; many skin diseases and infections are treated with keratolytic ointments. Correction of surface defects by such means has not, however, been widely practiced. Undoubtedly the lack of interest in this type of treatment is a product of the erratic and frequently unsatisfactory results obtained with the usual exfoliative agents and without standardized technics. These results have been unpredictable because the agents were uncontrollable. Nitric acid, hydrochloric acid, trichloracetic acid and carbon dioxide snow have been employed; their use cannot be too strongly condemned, for all too frequently they produce complete destruction of the full thickness of the skin and consequent scar formation. Again, strong keratolytic ointments give a reaction comparable to a second or third degree burn; in the latter case there is, of course, no regeneration of skin in the affected area. In some cases exfoliative agents have been prepared for use by the patient in home applications. Such a practice must, of necessity, be either dangerous or futile. If the agent is strong enough to produce adequate exfoliation, it is too strong to be used ad libitum by untrained hands; if it is mild enough to be safe when applied indiscriminately, it will be ineffective.

The degree of exfoliation must be controlled not only to avoid the risk of producing disfigurement more serious than the original defect but also to enable the physician to adjust the treatment in accordance with the severity of that defect. He must be able to produce superficial or deep exfoliation, over small or large areas, as the case requires.

For shallow pits and scars resulting from mild acne vulgaris, chickenpox, and similar disorders, for freckles and other surface pigmentations and keratotic patches, for large pores, blackheads and whiteheads, superficial exfoliation is sufficient. Deep pits and scars require deep exfoliation in a limited area. Lines, wrinkles, and puffiness of the eyelids can be removed only with moderately deep exfoliation over wider areas.

Although freckles may be removed by a "superficial peel" it should be remembered that freckling is a systemic disorder and will recur on each exposure to strong sunlight. Until the reasons for the irregular superficial mobilization of melanin from its storage depots are known, no permanent cure for freckles may be anticipated.

Melanomas, xanthomas, the common "liver blotch" and similar growths do not respond to exfoliation, since they usually extend through the deeper layers of the skin or displace the normal skin by their growth. The remedy for such defects is their excision and replacement by skin grafts.

The exfoliative agents and technics described in this paper have been used in the treatment of over two thousand patients during a period of fifteen years. While the degree of defect has often been extremely severe, in no instance has it not been possible to list the case as "improved", and in most cases the cosmetic results have been excellent. It should be understood, however, that no claim is made that perfect results are obtained. It cannot be said that a "100 per cent" cure, in terms of the quality of the patient's skin before the disfiguring disease, can be achieved. On the other hand, it might be pointed out that in the very cases in which it is most difficult to accomplish excellent results from the objective viewpoint, it is possible to obtain the best subjective effects. In other words, in the patient with a severe disfigurement, an even moderate degree of improvement is often sufficient to produce what might well be called a "100 per cent" cure of the psychologic handicap.

In this series there have been no complications resulting from infection. Occasional systemic reactions to the exfoliative agents have been observed, but in all cases they were immediate and transitory, and in no case has there been any evidence of organic damage from toxic absorption. The treatments are given in the office, there is little interruption of the patient's routines, and the overall period of treatment is brief.

These methods were worked out after considerable experimentation with various exfolia-

tive agents and different technics of application. They are presented in the belief that they may prove to be a valued addition to the armamentarium of the dermatologist and plastic surgeon, and in the hope that their availability may become more widely know to all physicians.

TECHNICS

Superficial Exfoliation

Superficial exfoliation results in the removal of large sheets of superficial epithelium whose thickness is about 0.08 inch, approximately the thickness of a sheet of yellow copy paper. Removal of such a sheet of skin carries with it all shallow skin defects such as mild pits and scars, sebaceous plugs and enlarged pores.

Exfoliative Agent. — A solution of the following composition is used:

Salicylic acid	12 gm.
Resorcinol	70 gm.
Lactic acid (85%)	24 cc.
Ethyl alcohol (95%) q.s.ad	180 cc.

These ingredients are mixed, bottled, and allowed to stand for twenty-four hours. The solution is then filtered and poured into a shallow acidproof enamel pan to a depth of about one-half inch. It is then exposed to ultraviolet light (75 polarity at a distance of 12 inches) for an hour, and bottled and sealed ready for use. It is important that the solution be fresh; it must be used within ten days after it is made up. Further exposure to air, as from frequent opening of the bottle, brings about a rapid loss of potency.

When prepared exactly as described above, this solution has maximal potency but produces minimal systemic reaction. The necessity for irradiation was established by careful controls with untreated solution. Since chemical analyses of the solution before and after irradiation have not been carried out, the precise effect of the ultraviolet light has not been established. However, the color of the solution deepens markedly after irradiation, and it is probable that the process involved may be an oxidation of the resorcinol, accelerated by the ultraviolet rays. Whatever the explanation, the fact remains that the irradiated solution produces an effective exfoliation, and the plain solution does not.

Procedure. — The patient is given a mild sedative; we have found seconal sodium (¾ grain) or pentobarbital sodium (1½ grains) effective. The area to be treated is cleansed thoroughly, first with soap and water and then with alcohol and ether. After cleansing, the skin is exposed to ultraviolet light (75 polarity at a distance of 24 inches) for two to three minutes — an amount sufficient to produce a mild erythema.

The exfoliative liquid is now applied, with a small cotton swab on an applicator stick, over the area to be treated. Five separate applications are made, at intervals of 10 to 15 minutes. In no case is the liquid applied until the previous application is entirely dry. The amount of liquid actually applied to the skin is small. One applicator, dipped a single time in the solution, contains an amount sufficient for one application over the entire face and forehead. Since less than two drams are taken up by the applicator, and since approximately half of this remains in the cotton, less than a dram of solution is distributed over the entire area in an application.

During the period in which the applications are made, the patient is given six glasses of water. Twenty minutes after the final application, rubberized adhesive tape is applied directly to the skin over the entire area. (See Figure 1) By the exclusion of air from the area the degree of skin destruction is greatly increased and a better slough is obtained.

Since there is occasionally a tendency to vertigo, varying with the individual, as a result of the treatment, the patient is kept at bed rest for an hour after the final application before being permitted to go home. This tendency to vertigo is the only "toxic manifestation" of systemic absorption we have observed in the entire series.

Twenty-four hours after the original treatment the plaster is removed by the physician and powdered zinc stearate (U.S.P.) is applied thickly over the entire area. The patient is instructed to continue applications of the powder five or six times a day for a period of five days. During this time no soap, water, cream or cosmetics are used. On the evening of the sixth day the patient applies light liquid petrolatum liberally over the entire area. Twelve hours later, on the following morning, exfoliation is complete, and the final office visit is made (See Figure 2). The dead tissue, which peels off in large sheets,



Figure 1. Adhesive plaster mask in place after treatment of entire face and forehead. *Note:* The patient shown in these illustrations was treated for deep wrinkles of the face, and would ordinarily have been given shaped latex adhesive pieces for application at home, as described in the text. For demonstration purposes, however, the full mask was applied.



Figure 2. Appearance of completed exfoliation before removal of dead skin. Note areas of moderately deep exfoliation under eyes, with superficial exfoliation over remainder of facial area.

is removed, and a completely regenerated underlying epithelium is revealed (Figure 3). The skin is washed with soap and water; a mild astringent (witch hazel) is applied. The patient is instructed to use the zinc stearate powder as a base, over which ordinary cosmetics may be employed, for three to four days after discharge. A variable degree of erythema may be noted immediately after exfoliation, but this disappears entirely in four to five days.

Male patients are instructed to shave closely on the morning of the initial treatment, and to omit shaving until after exfoliation is complete. It may be noted that bearded areas are as a rule less affected by disorders causing pits and scars than are the forehead, cheeks and nose.

Deep Exfoliation

A. Deep Pits and Scars

Deep pock marks and scars require deep exfoliation of each circumscribed area. There are actually three stages in treatment: (1) removal of old scar tissue; (2) stimulation of formation of new tissue; (3) approximation of normal skin levels.

Medication, cleansing, and irradiation are carried out as for superficial exfoliation. Each pit or scar is then treated individually as follows. One drop of tincture of cantharides is placed in the pit. After two or three minutes the application is dry, and another drop of the tincture is applied. Again the liquid is allowed to dry. The treated pit is then sealed off by covering it with a small amount of plain flexible collodion.

Twenty-four hours later a blister has formed in each treated area. Each blister is punctured, and zinc stearate powder is applied to assist in scab formation. The patient is instructed to continue to apply the powder, frequently enough to keep the areas dry, for one week, and then to apply light liquid petrolatum the night before returning for the next office visit.

At the third visit, the physician removes the scabs, exposing the reddened pits. The central scar tissue has now been removed. Use of the zinc stearate is continued for the following week; ordinary cosmetics are permitted over it.

At the fourth visit, each pit is touched with an applicator which has been dipped in a few drops of liquefied phenol. An escharotic whitening is noted at the sites of these applications. The electrocautery is then used to "plane off"



Figure 3. Removal of slough following treatment for facial wrinkling. Note the manner in which the dead tissue peels back in large sheets, exposing the newly regenerated epithelium.



Figure 4. Use of electrocautery to approximate normal skin levels in wrinkled area. The cautery is used in the same fashion for deep pits and scars. Note area of escharotic whitening due to the application of phenol.

the edge of each pit; the cautery is drawn smoothly over the rim of the pit, the motion being directed from the outer to the inner area in short spokelike strokes (Figure 4). By this means the extruding rim is planed off to the level of the adjacent skin, and growth is stimulated.

Thus the three steps are achieved: The blister formation produced by the cantharides removes the old scar tissue, and the phenol and cautery not only level off the rim of the pit but provoke the growth of new and normal tissue. Specifically, the rim of normal but highly stimulated tissue acts as a minute pinch graft, actually proliferating and extending into the area formerly occupied by scar tissue.

The application of the phenol causes a brief sharp sensation of pain, followed by an immediate local anesthesia. This anesthetic effect makes it unnecessary to employ any other anesthetic agent for the use of the cautery.

It should be noted that the cautery is first brought to red heat and is then disconnected for one second before it is used; it should never be applied to the skin while red hot.

After treatment, elastic adhesive plaster is applied to produce a slough. As usual, this occurs within twenty-four hours, at the end of which time the plaster is removed. Zinc stearate applications are used for one week. The patient then applies liquid petrolatum and returns to the office the following morning for the final exfoliation.

One month after this treatment has been completed, a superficial exfoliation is carried out over the entire face, thus eliminating any residual irregularities or differences between treated and untreated areas.

B. Deep Lines and Wrinkles

Deep lines and wrinkles on forehead, cheeks, or between the eyes, and puffiness of the eyelids, are readily treated by a moderately deep exfoliation of the affected areas, followed by a superficial exfoliation over the entire area.

Phenol is the exfoliative agent and the electrocautery is used to plane out the deeper lines

and crevices in the same manner as has been described for smoothing the borders of deep scars and pits (Figure 4). The process is carried out in three steps, and the entire treatment requires only a week.

On the first day the eyelids are treated. The lines are touched lightly with an applicator moistened with liquefied (88%) phenol, and the area is immediately dried with cotton. The cautery is then used to smooth out the surface, and adhesive plaster is applied to the area.

On the second day, this plaster is removed, and the forehead is treated. A mixture of phenol and alcohol (30 drops of each) is brushed over the lines with a small applicator, and is dried immediately with cotton. The cautery is now used to smooth out the lines in the brow, and adhesive plaster is applied over the freshly treated area.

On the third day the plaster is removed and the usual applications for superficial exfoliation are made over the face and neck. However, instead of covering the entire area with adhesive, the patient is given shaped pieces of adhesive tape latex plasters, marked for right and left cheek, forehead, chin and lips, with instructions to apply them and leave them on overnight. The next morning they are removed, and zinc stearate is applied as usual. On the evening of the sixth day the patient applies liquid petrolatum, and on the seventh day returns to the office for the final complete exfoliation of all treated areas.

Precautions in Use of Phenol. — The actual amount of phenol applied to the skin is rarely more than 15 to 20 drops, of which the bulk is left on the applicator. Such applicators should be no larger than a small ear swab. Only a light coating of phenol is applied, and it is dried immediately with cotton. It is never applied over a large area in one treatment. Spot treatment is used for regional defects; and if, for example, the entire forehead requires treatment, one-half the area is treated and fifteen minutes are allowed to elapse before the second half is treated.

With such precautions no danger attends the use of phenol. The action is limited to the superficial layers of the epidermis, and absorption is held to a minimum by the coagulating action of the phenol itself. The higher concentrations used produce coagulation; lower concentrations merely denature, rather than precipitate, proteins.

The use of phenol should be confined to the areas and purposes described. It should never be used on the neck or other outlying areas; nor should it be used within two weeks after a patient has used a paraphenalein hair or eyelash dye.

There may be a temptation, on first using this technic, to attempt to neutralize the phenol by the application of alcohol. Such a procedure destroys the effectiveness of the treatment.

DISCUSSION

Induced exfoliation is thus of value in (1) correcting surface defects of the skin and (2) combating the facial effects of premature age.

The former is unquestionably the far more important use. For example, thousands of young persons every year suffer from acne vulgaris. Many seek the aid of their physicians, and with modern treatment the acute disease process is stopped. But what of the aftermath? Can we consider these patients to be "cured" simply because the lesions are no longer draining and further erosion does not take place? Such patients do not themselves feel that they have been healed. At the very time that they are laying the foundations for their social and professional futures they find themselves disfigured by the stigmata of their disease. The attempt to cover these with cosmetic preparations often only accentuates the craters and irregularities. Yet, whether they go to family physician or specialist, they are ordinarily told to "forget about it." This is easy advice for the physician to give, but it is very bitter for the scarred young patient to take. Much needless suffering and permanent psychologic handicap results. For these patients, and those suffering from similar defects as a result of smallpox, chickenpox, and the like, the removal of the defect seems like the beginning of a new life.

There is much talk today of preventive medicine. Removal of skin defects would seem to be not only the final step in cure of disfiguring diseases but also truly a preventive therapy. Rather than allowing these patients to suffer needlessly for years, and to convert normal human sensitivities into full-fledged neuroses, why should they not be treated at once, as a matter

of routine, as soon as the active disease process has been arrested or run its course? The need for such treatment is great; yet at the present time it is almost wholly unsatisfied.

Such conditions should not and need not exist. The technics given have, we repeat, been used in over two thousand cases with no instance of infection or of severe local or systemic reaction. The occasional slight or moderate vertigo immediately after the application of the exfoliative solution has been transitory and has never been followed by any evidences of systemic damage. As was shown in the description of the technic, the actual amount of exfoliative agent applied to the skin is extremely small. Such minimal amounts seem to produce no toxic effect on the parenchymatous tissues.

There is frequently an edema, with evidence of cellulitis, in the treated areas, but this usually passes during the first week and in no instance does it continue beyond the second week.

It is interesting to note that exfoliation not only does not harm the skin but actually exerts a "normalizing" influence. This influence is notable in cases of acne vulgaris, where exfoliation is of definite value as a therapeutic agent as well as for repair of damage already done. In these cases the skin is of the oily type, with blocked follicles, comedones, and irritation and self-infection from scratching. Exfoliation definitely tends to reduce the excessive activity of the sebaccous glands in these individuals.

In extremely severe scarring it is sometimes necessary to repeat the superficial exfoliation several times in order to achieve cosmetic success; yet there is never any tendency toward undesirable skin texture or growth. Rather, there is an increase in tone and improvement in texture.

The use of these technics in the treatment of wrinkles remains to be discussed. The chief importance of the treatment lies in the fact that it offers a safe and effective alternative to the practice of "face lifting." The latter practice has continued to flourish because we have had no better answer to the desire to combat the aging process.

Face lifting is unanatomical; the underlying structures, displaced by the artificial tension, tend to resume their normal positions. It is dangerous; there is always the threat of infection and of keloid formation. It is frequently unsuccessful; the degree of scar formation following surgical incision is an X quantity, and asymmetry or distortion may result from overgrowth of scar tissue or disparity in the reparative processes on either side of the face. It is temporary; the structures sag once more and time and emotion make their marks anew. And each repetition of the operation multiplies many times the risks of the previous one, because the work must be done in a field where scar tissue is already present.

These are the objective reasons for decrying the use of the procedure. There is also a subjective one which has considerable weight with the patient — face lifting leaves its telltale marks. The distinctive scars, however faint and however well concealed by the hairdress, betray the patient's search for youth every time her hair is dressed. The degree of embarrassment which some women feel at this repeated betrayal is astonishing.

Induced exfoliation has none of these drawbacks. Underlying structures are not disturbed. There is no distortion, no scarring. Infection and keloid formation do not occur. The process may be repeated as often as the inevitable new wrinkles appear.

The normalizing influence of exfoliation on oily skins has been discussed. The skin in which excessive or premature wrinkling takes place is usually dry, with insufficient lubrication and lack of underlying fat pads, yet the same tendency to "normalize" appears, and the skin improves in texture and tone even after repeated treatments.

The time factor is also important. The entire treatment by exfoliation requires only a week. And last, but to the patient by no means least, there is no telltale sign to betray her search for the Fountain of Youth.

CONCLUSION

Detailed technics for the production of superficial and deep exfoliation of the skin are presented. The use of these technics is discussed in relation to (1) repair of surface defects and discoloration of the face and (2) removal of facial lines and wrinkles. Special emphasis is given to the opportunity for use of such treatment for acne vulgaris and similar disfiguring diseases or conditions.

TUBERCULOUS PERITONITIS CASE REPORTS WITH PATHOLOGICAL FINDINGS

Captain Paul K. Anthony, M.C.
Army of the United States

Four cases of tuberculous peritonitis at a station hospital in England in PW patients calls attention to this infrequently discussed subject. These cases are reported after a review of about eighty cases of pulmonary tuberculosis admitted to this hospital during the past eight months. The study is largely a clinical one and was undertaken after an observation of four cases whose symptoms were abdominal in character. Tuberculosis has long been known to affect serous membranes with miliary, serofibrinous, plastic and adhesive involvement, usually single, but sometimes in combination. The peritoneum is less often involved than the pleura, but more often than the pericardium.

The disease is most prevalent in children and young adults, though no age is exempt. Kellett[1], in 1938, in a review found most cases occurring between the ages of two and five years. Holt states that Still found the largest number in the second year of life in a series of one hundred cases. Wilkinson[2], in an examination of five hundred and ninety-three cases of non-pulmonary tuberculosis showed that tuberculous peritonitis was more common in adolescence and in the female. There were twenty-nine cases of peritonitis, eleven occurring between the ages of sixteen and twenty. In Osler's textbook[3], a review of three hundred and fifty-seven cases from the literature showed the disease occurred most frequently between twenty and forty, twice as often in females, and more common in Negroes in America. Stubenbord and Spies[4], in 1938 after reviewing two hundred and fifty-seven cases, observed that forty-six percent occurred between the ages of one to ten years, eighteen percent between ten and twenty years, and seventeen percent between twenty and thirty years.

The varieties are classified under three main headings, according to the literature: 1-ascitic or exudative; 2-serofibrinous or loculated encysted; 3-hyperplastic, chronic, or fibroid adhesive and obliterative.

Exudative peritonitis occurs mostly in children and young adults. The onset is usually gradual, taking several months to show any notable protusion. The distention is almost painless. A low grade fever is generally noted. Occasionally the onset is acute, simulating acute peritonitis and the peritoneum is involved as part of a generalized miliary tuberculosis. This type is usually seen associated with tuberculosis of the ileocecal region.

The serofibrinous variety may have an insidious or acute onset. McPhedran quoted by Stubenbord and Spies states that tuberculous peritonitis must be thought of if a patient presents abdominal pain, a low grade fever, anorexia, fluid and swelling. Holt mentions irregularity of the bowels and vomiting as important symptoms. As adhesions develop, the exudate becomes encysted in pockets and the omentum and intestine become matted together. In more advanced stages, retroperitoneal abcesses and caseous processes may infiltrate the wall of the gut and cause ulceration.

Plastic adhesive peritonitis is a later stage of serofibrinous inflamation, creating extensive and thickened adhesions and involving the serosal surfaces, omentum and viscera. Fibrous contractions may cause intestinal obstruction. The omentum is often rolled upon itself. Surgical exploration may reveal caseous deposits or enlarged lymph nodes, besides the matted omentum and intestines. Besides the toxic manifestations of tuberculosis, localizing symptoms may become distressing because of fixation and stenosis of the bowel. Separation is difficult at the risk of perforation. Rarely the intestine itself may become perforated and pus may drain from the peritoneum into it. Most cases are studded with the typical miliary tubercles.

It is generally accepted that tuberculous peritonitis is secondary to a primary focus elsewhere, though it may not be found or demonstrated. The spread may be locally from retroperitoneal lymph nodes, fallopian tubes, or as a result of blood stream invasion. In the study of two hundred and fifty-seven cases by Stubenbord and Spies, the primary focus was encountered in about forty percent of the cases. No primary focus could be demonstrated in the remaining cases. In Wilkinson's opinion most cases arise hematogenously or by an ascending infection of a fallopian tube. In the majority of patients in his report of five hundred and ninety-three cases

there was no gross evidence of past or present lymph node tuberculosis. This does not indicate, he states, that these patients didn't suffer from some degree of tuberculosis of the lymph nodes at the time of their primary infection because in some cases, the lymph nodes tuberculosis may have subsided before Roentgen examination was made, and in others, enough time may not have elapsed for calification in the nodes to develop.

The prognosis for treated cases is good, at least temporarily, providing that there are no complications or that it is not a part of a miliary tuberculosis. Even in these cases, some ultimately die of pulmonary tuberculosis. It is known that the earlier the disease occurs, the worse the prognosis. Authors seem to vary in their prognostic statistics. In Maingot's[5] opinion, nearly half were cured by medical and surgical interventions combined and death was high in untreated cases. Fredrick Price states that the peritoneum is involved in 15% of all fatal cases of tuberculosis. In the review of two hundred and fifty-seven cases, Stubenbord and Spies state that results were not encouraging. There was an improvement in about 56% of the cases — death in 32.5% and no improvement in 11.5%. The largest number improved were surgically treated cases — eight-two percent. After medical treatment alone only eighteen percent improved. Medical treatment consists of rest, diet and heliotherapy. Furness, Brown and Sampson all advise heliotherapy, natural or artificial, except in the acute, active and ulcerative conditions. Surgery consists of removal of fluid by small incision or laparotomy. Some authors feel exposure of the diseased peritoneum to air is beneficial. Others doubt it.

CASE REPORTS

CASE 1 — A German POW, aged 21, was admitted to the hospital 7th of January, 1945. He was sick only twelve days, with the following complaints: Swelling and pain in the abdomen, constipation, and anorexia. In his past history, he revealed having pneumonia in November, 1943, but no other diseases. Also stated that he drank raw milk all during his life. There was no family history of tuberculosis. On examination, a tense swelling of the abdomen was noted. Paracentesis was performed twice. Paracentesis yielded 4000 cc of yellow-green fluid with a specific gravity of 1.020, 2000 cells per cc, with a differential showing ninety per cent lymphocytes. Two weeks later, 1500 cc of yellow fluid was removed. Specific gravity was 1.012; cell count showed 100 cells with lymphocytes predominating. Cultures and smears were negative for acid-fast or other organisms. Guinea pig inoculation was not carried out. Urines, and blood studies were normal. Roentgen examination of the chest revealed no pathologic process. A flat plate of the abdomen was negative. An exploratory laparotomy was performed 19 March, 1945. On opening, the abdomen, a small amount of straw colored fluid was found. The peritoneum was thickened and adherent to loops of the bowel and the abdominal wall and studded with tubercles of various sizes and consistencies. Pathological report of the biopsy confirmed the diagnosis of tuberculous peritonitis. Since the operation, the patient seems to have improved. There has been little perceptible swelling of the adbodmen but slight pain and tenderness in both upper quadrants remain.

CASE 2 — A German POW age 19 was admitted to the Hospital 29th of November, 1944, because of abdominal pain, a daily watery stool, and a progressive loss of weight of 45 kilos during the preceding two months. Patient gives no personal or family history of tuberculosis but states that he drank large quantities of raw milk for many years. Patient appeared markedly asthenic and anemic. Examination of the chest disclosed a few crackling rales and suppression of breath tones in the right upper lobe. Roentgen revealed a moderately advanced tuberculosis with cavity formation. The abdomen was slightly distended and tympanitic. Laboratory examination revealed a definite secondary anemia; urine and stool cultures were negative. Patient was transfused many times after which an exploratory laparotomy was performed on 29th of January, 1945. Lesions resembling tuberculosis were noted on the serosal surface of the small bowel, and mesenteric nodes were found to be large, firm and yellow. There was about 30 cc of blood stained, straw-colored fluid in the abdominal cavity. He seemed to improve for a couple of weeks post operatively, but then gradually lapsed into a state of inanition with inability to take food or liquid. The temperature rose daily. Death occurred 7th of March, 1945.

At autopsy, several small loops of small intestine were intimately adherent to one-another and to the abdominal scar by fibrous and fibrinous adhesions. There was about 500 cc of clear straw colored fluid noted. The ileum felt thicker than normal, and numerous yellowish raised plaques with punctate hemorrhages were found on the serosal surface. The mesenteric and retroperitoneal nodes were enlarged and caseous. On opening the ileum, many shallow ulcers were noted, and the process seemed to stop abruptly at the ileo-cecal junction.

The hilar lymph nodes were enlarged and caseous. The right upper lobe and left lower lobe were infiltrated by a caseous bronchopneumonia; and located in these same lobes were found large cavitations lined by a grayish necrotic material.

CASE 3 — An Italian POW, age 28, was a captive of the Germans since September, 1943. As a prisoner he worked in the coal mines and lived on a meager ration. In July, 1944, he complained of severe cough, pain in the chest, fever and chills, but was not hos-

pitalized until September of the same year. Patient was admitted here, 8th of February, 1945. In addition to the above, he complained now of pain in the abdomen and frequent uncontrollable vomiting. Bowel movements were normal. Examination revealed an acutely ill, toxic and emaciated patient. Examination of the chest disclosed dullness and diminished to absent breath tones throughout. Coarse moist rales were heard throughout. Repeated x-ray studies showed disseminated miliary, and mottled parenchymal infiltration bilaterally. Previous to his admission to this hospital he received five hundred forty thousand units of Penicillin. His daily temperature was septic throughout his course. The sputums were consistently negative for acid-fast bacilli. He expired 22 March, 1945.

At autopsy about twenty-five cc of straw colored fluid was found in the peritoneal cavity. There were many scattered, enlarged but firm retroperitoneal and mesenteric lymph nodes. A few fibrous adhesions were found about the loops of the small bowel. On sectioning a thickened ileum, the mucous membrane was found studded with miliary tubercles. Pleural cavities disclosed fibrous adhesions, but no fluid. The lungs were filled with a dense conglomeration of miliary tubercles of all sizes, with little normal lung parenchyma remaining. The mediastinal lymph nodes were adherent, thick, enlarged and a dark slate-gray in color, with a yellowish soft framework in the center. The liver, spleen and kidneys showed evidence of metastatic miliary tubercles. Other organs appeared normal.

CASE 4 — An Italian POW, age 20, was a prisoner of the Germans since September, 1943. As a prisoner, he worked also in coal mines and lived on a meager ration. He was captured by the Americans 11 December, 1944. When seen by an American medical officer 12 December, 1944, he stated he had been ill for the past three or four months, with a severe cough, laryngitis, pain in the chest and abdomen, progressive loss of weight and weakness. The patient was admitted to this hospital, 8th February, 1945. Examination disclosed diffuse rales in both lung fields. X-ray studies showed a far advanced, bilateral, pulmonary tuberculosis with cavitation. Sputum was positive for acid fast organisms. He died of a severe pulmonary hemorrhage 4th of April, 1945. At autopsy about one hundred cc of straw colored, opaque fluid was found in the pelvis. Mesenteric lymph nodes draining the ileum and the ascending colon were large and caseous. The serosal surface of the distal half of the ileum and beyond it showed a great number of grayish-yellow caseous areas, and multiple shallow ulcerations. These caseous nodules were more numerous about the ileo-cecal junction. The lungs were adherent to the parietal pleura by thick fibrous and fibrinous adhesions. Both lungs revealed caseous pneumonia and cavitation throughout. The liver and spleen revealed a few miliary tubercles. Other organs seemed normal.

COMMENT

This investigation has been largely clinical and several facts stand out in comparing our report with previous studies.

1. Analysis showed that all four cases occurred in young adults, between the ages of 20 and 30. No previous or family histories of tuberculosis were obtained.

2. Maingot states that thirty or forty percent of the cases are due to bovine infection. Two of our cases gave a history of drinking raw milk for many years.

3. It is generally accepted that tuberculous peritonitis is secondary to a primary focus, commonly either in the lungs, nodes or intestine, though this primary focus may not always be found. In one of our patients the primary focus could not be found. In the other three cases, the spread was undoubtedly hematogenous from primary foci in the lungs.

4. In our clinical analysis each case presented subjective or objective findings or both. All four cases had pain in the abdomen. One patient vomited for three months before he expired. Two cases had irregularity of the bowels, one a diarrhea and the other constipation. Two cases presented marked swelling of the abdomen and in these, peritonitis was observed at exploration.

5. Sputum analysis for acid fast organisms was positive in only one case. Tuberculin tests and guinea-pig innoculations were not carried out.

6. Three of these four cases have died. The present status of Case 1 is uncertain, though he seems clinically improved following his laparotomy.

CONCLUSION

Four cases of tuberculous peritonitis, after a survey of about eighty cases of pulmonary tuberculosis in POW patients, have been brought to our attention at this station hospital. Literature discloses that the peritoneum is involved in fifteen percent of all fatal cases of tuberculosis. The diagnosis was confirmed in two cases by laparotomy and three were verified by post mortem examination.

This paper has attempted to bring out the salient features and the literature on tuberculous peritonitis in reporting these four cases.

BIBLIOGRAPHY

1. Kellett, Charles Ernest, M.D., M.R.C.P., "Tuberculous

Peritonitis" — British Encylopedia Medical Practice, 9: 557, 1938.
2. Wilkinson, M. C., M.B.B.S., Medical Superintendent Essex County Council Sanitarium, "Pathogenesis of Non-Pulmonary Tuberculosis" — British Medical Journal, page 660, 11 November, 1940 — Published by British Medical Association.
3. Osler, Sir William — Text Book of Principles and Practice of Medicine — "Tuberculous Peritonitis" — Edited by Thomas McCrae, M.D., 1935, 12th Edition — Appleton Century.
4. Stubenbord, J. C. III, and Spies, J. — "Tuberculous Peritonitis — Analysis of 257 cases"; Surg. Gyne., and Obs. 67:269 to 272 — September, 1938 — Surgical Publishing Company of Chicago.
5. Maingot, Rodney, F.R.C.S., England — "Tuberculous Peritonitis" — Text Book of Abdominal Surgery, Volume II, 1940, Appleton Century.
6. Price, Frederick W. — "Tuberculous Peritonitis" — Text Book of Practice of Medicine, Page 699 — 6th Edition Oxford Medical Publications.

PENICILLIN INEFFECTIVE FOR TETANUS OHIO DOCTOR REPORTS

Tetanus, more commonly known as lockjaw, does not respond to penicillin treatment, according to W. A. Altemeier, M.D., from the Department of Surgery, University of Cincinnati College of Medicine, and the Cincinnati General Hospital.

Writing in the January 12 issue of *The Journal of the American Medical Association*, Dr. Altemeier said:

"A clinical study of 16 cases of established generalized tetanus has failed to show evidence of any beneficial effect of penicillin on the course of this disease. There was no obvious fall in the temperature or pulse rates as has been repeatedly seen in other infections susceptible to its action, no decrease in mortality or morbidity nor any definite decrease in the severity, duration and frequency of the convulsive seizures which could be attributed to the action of penicillin. Exceptions may be found in cases of tetanus complicated by pneumonia or other infections susceptible to penicillin. In such instances, however, the improvement that occurs is due to the effect of the chemotherapeutic agent on the complicating infection and not on tetanus."

Tetanus is an acute infectious disease of the central nervous system caused by a germ called the Clostridium tetani and characterized by painful spasms of the muscles due to the action of a toxin. Tetanus usually follows an injury, often trifling, but especially puncture wounds or lacerations of the hands or feet which have come in contact with the germ.

Dr. Altemeier said lockjaw occurs so frequently in small and often insignificant wounds because these do not receive a physician's attention. Patients with large wounds are immediately injected with tetanus antitoxin which prevents the poison from spreading.

In tetanus there is rarely any sign of infection at the source of the laceration or puncture wound. The bacteria produce a powerful toxin which spreads to susceptible tissues throughout the body. After a sufficiently large dose of the toxin has become fixed in the central nervous system, death apparently is inevitable under the present methods of treatment. Large doses of antitetanic serum, which are effective in the prevention of the disease, are of no use once poison has become fixed in the central nervous system.

Penicillin has not been beneficial in the treatment of tetanus because it has no effect on the Clostridium tetani toxin. Dr. Altemeier concluded that until some chemical agent can be found to directly attack the fixed toxin, successful treatment of the disease must depend largely on an early diagnosis.

NEW ASSOCIATE GENERAL MANAGER FOR A. M. A.

Dr. George F. Lull, formerly deputy Surgeon General, United States Army Medical Corps, has been appointed Associate General Manager of the American Medical Association.

There is still much ahead in the control of tuberculosis. Mortality reports may give the number who die, but it is also necessary that contacts be ascertained to find others who need medical care or to locate sources of infection who must be kept apart from the well. In 1943, only 33 per cent of the deaths from tuberculosis in Indiana were reported before the death certificate was recorded. Many of those were undoubtedly properly diagnosed and under care for some time, yet there were also many whose disease was not recognized until too late.

There is need for greater recognition of the problem of the recovery of the aged. Many are of the Chronic type, able to be about, and therefore more dangerous because of the potentialities of spreading infection to others, particularly young children. Tuberculosis mortality rates are falling, but in general the percentage reduction is much higher in the younger groups than among those of older age. Murray A. Auerbach, Bulletin, Indiana State Bd. of Health, Nov. 1945.

Physical Medicine Abstracts

John S. Coulter, M.D.

SAFETY OF MODERN ALTERNATING POSITIVE AND NEGATIVE PRESSURE RESUSCITATORS

Henry Schwerma, Ph.D., and A. C. Ivy, Phl.D., M.D.
IN THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, 129;18;1261
December 29, 1945

There is no evidence in this study that artificial respiration of the suck and blow type (+ 14 mm. of mercury and — 9 mm. of mercury) caused lung damage.

In 5 anesthetized dogs given artificial respiration with the E and J Resuscitator for one hour in the presence of natural breathing no evidence of emphysema was found.

The rate of return of blood pressure to the control level after the administration of curare was studied when dogs were given artificial respiration by various mechanical methods for one to three hours. The E and J Resuscitator was used on 20 dogs, the General Electric intermittent positive pressure Pneumolator on 7, and B intermittent positive pressure device on 8 and the Drinker Respirator on 7. No difference was found.

ULTRAVIOLET LAMPS FOR DISINFECTING PURPOSES

Present status
W. W. Coblentz, Ph.D., D.Sc., Washington, D.C.
In THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, 129;17;1167
December 22, 1945

The results of this investigation, which extended over a period of six months (December to May) are impressive and instructive in showing that the incidence of respiratory illness in the barracks irradiated with low intensity ultraviolet lamps followed the same undulations that occurred in the adjacent control barracks, whereas in the barracks irradiated with a high intensity there was a definite reduction in the incidence of respiratory illness — a reduction estimated at 25 per cent for the entire period of observation of respiratory illness in the high intensity irradiated group as compared with the control group, "and not due to chance." Hence, while ultraviolet radiant disinfection of air can be substituted for actual air displacement in reducing cross infection in chickenpox, measles and mumps, and with less certainty in reducing the incidence of colds, there is no evidence that will justify high pressure sales promotion of ultraviolet disinfecting lamps as a cureall or sureshot preventive of respiratory illness. Disinfection by ultraviolet radiation can serve a useful purpose, but it has its limitations.

ACUTE BRACHIAL RADICULITIS

Course and Prognosis
G. Joly Dixon, M.D. Bubl., MRCP, T.B.S. Dick, MB Manc.. MRCP
In THE LANCET, 2;22;708
December 1, 1945

This article is based on a detailed study, over about two years, of 16 typical cases of acute brachial radiculitis seen either at an emergency hospital or, through the courtesy of Dr. Fergus Ferguson, at the Manchester Royal Infirmary. These cases all conform to the syndrome described by Spillane (1943), invariably starting with some pain in the root of the neck and shoulder region. Usually the pain is very severe, and often it com-

plicates the course of an acute infectious fever or the convalescence from a surgical operation. Palsy is often not noticed for several days, in fact not until the pain begins to abate; then the patient usually finds he is unable to lift his arm. Muscular wasting follows close on the heels of the palsy and is usually extensive at the end of 14 days. An area of sensory loss, although not complained of by the patient, is usually found over the deltoid muscle. We found anhydrosis in the analgesic area in 3 of 6 patients, whom we subjected to powerful stimulation of sweating; normal sweating was observed in the analgesic area in the other 3 patients.

Most of the Service patients were fitted with abduction splints very soon after the onset of the palsy. The civilian patients were given vitamin B_1 at various periods during the disability. Neither of these procedures appeared to alter the course of the disease in any way.

The course of 16 cases of rapidly developing painful dystrophy of the muscles of the shoulder girdle, attributed to brachial radiculitis, has been followed for a considerable period.

Ten cases have shown complete functional recovery in 8-18 months. Besides these, one was so far recovered at the end of 5 months that he returned to duty; a second with complete recovery on one side is recovering from a relapse on the other side; and a third is still showing slow recovery at the end of 2 years.

Of three cases that have been stationary or are deteriorating, one has very little disability; the diagnosis in a second is doubtful; and only the third has a severe residual disability.

Recurrences developed in five cases; two at the end of 6 weeks; two at 6 months; and one at the end of 5 years.

TREATMENT OF RHEUMATIC FEVER

Newell C. Gilbert, M.D., Chicago, Illinois

In THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION, 38;4;124
April 1945

There is one thing that does help, and that is summed up in a report of the British Medical Research Council as "Maternal Care." Maternal care means an adequately planned diet, proper rest before and after meals, and adequate sleep.

Various sulfonamides, and especially sulfanilamide, have been used in daily small doses over long periods of time as a prophylactic agent against upper respiratory infections and the resulting recurrence of rheumatic fever.

The most important demand in the treatment of rheumatic fever is its immediate recognition and immediate care and bed rest, even with the mildest symptoms. The bed rest must be absolute and continuous.

During the initial infection, or the early stages of recurrence, patients can be at home or in the hospital for study and intensive treatment. After the early stages they should be in a convalescent home, built and planned and operated for this purpose. The city hospital does not meet the requirements. We should avoid the hospital atmosphere.

The convalescent home should be far enough out of the city to insure an abundance of sunshine from which the actinic rays have not been filtered out by city dust and smoke.

THE GENERAL TREATMENT OF ARTHRITIS

Loring T. Swain, M.D., Boston, Massachusetts

In THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION, 38;12;489
December 1945

The first step in treating a hypertrophic joint is to rest it. In extreme cases it is beneficial to immobilize such a joint in a plaster cast for a week or more. After such a complete rest invariably the joint is painless and more movable; and as it is protected from further strain, the bony growth ceases.

Heat is always advisable in these cases, especially for older people whose circulation is poor because of arterial changes. Moist heat, if used regularly, stimulates sluggish circulation and relieves soreness and pain.

Diet does not seem to play an important part in curing degenerative joint disease, although in the case of overweight patients a diet low in carbohydrates and sweets is advisable.

Permanent relief from pain in the back, neck, hips, and knees, however, comes principally from correction of faulty posture which causes the strain. This is done by special rest positions and exercises.

As a tired person always droops into poor posture, the same positions and exercises are prescribed for these rheumatoid cases as were used

in the treatment of the osteo-arthritics, but for a different reason. Their poor posture must not be allowed to interfere with normal functioning of the abdominal viscera through crowding.

Taken morning and evening, these exercises aid digestion and stimulate circulation through the abdomen. The flat hyper-extended position gives the heart, lungs, and diaphragm their best chance to function. A little explanation will make this routine clear to the patient, and he will cooperate fully.

There is no specific diet that can be prescribed for rheumatoid arthritis, although we know certain facts which help in planning a balanced diet. Dr. Ralph Pemberton has shown that many cases have low sugar tolerance: therefore, the diet should contain the minimum amount of sweets and carbohydrates.

The diet, therefore, should be well-balanced with protein, carbohydrates, and fats and should be rich in vitamins and minerals. In my experience extra vitamins are indicated, as most of these cases have been deficient for a long time, and their tissues change slowly even with large doses of vitamins.

In many cases gastric analysis shows a lack of hydrochloric acid, which may be the cause of the failure to absorb iron and vitamins. This acid should be supplied when indicated.

FIBROSITIS

Douglas H. Collins, M.D., Emergency Medical Service Medical Superintendent and Pathologist, Wharncliffe Hospital, Sheffield; Rheumatism Research Fellow, University of Leeds

In THE PRACTITIONER, 155;5;299
November, 1945

This rather inappropriate term for most conditions of non-articular rheumatic disease is justified only by common usage. To help in planning treatment, four common etiological types of fibrosis may be borne in mind:—

(1) Toxic: myalgia associated with, or immediately following, various systemic intoxications or infections.

(2) Mechanical: related to acute or repeated strains of ligaments and muscle insertions.

(3) Postural: muscle spasm resulting from injury or disease of joints or from developmental or occupational deformities.

(4) Psychogenic: Halliday (1937) drew attention to the high proportion of compensation insurance cases in which rheumatic complaints were due to psychogenic factors. Boland and Corr (1943) found psychogenic rheumatism to be a frequent cause of disability among rheumatic patients admitted to a U. S. service hospital. They state that the diagnosis is facilitated by recognizing such points as gross incongruity of symptoms with structural changes, persistence of disability, bizarre posture and associated hysterical manifestations. Ellman and his colleagues (1942) examined psychologically fifty mixed service and civilian patients diagnosed as fibrositis of over three months' standing. They found thirty-five to be suffering from common psychological disorders bearing on their complaint. Hysterical features were most common. They state that vague shifting pains suggest an underlying emotional disorder, whilst strictly localized pain points to the presence of organic changes.

Copeman and Ackerman (1944) offer an anatomical explanation of that further form of fibrositis associated with tender, palpable nodules. These nodules are apparently vascular, fatty structures liable to oedema and congestion, in which state they may impede the smooth working of muscles and tendons in their fibrous envelopes or even herniate through foramina in the fascial investments.

TREATMENT. — Therapeutic infiltration of a local anaesthetic is now an established procedure when pain is referred to accessible tender spots, but good results are not constantly achieved.

Success in treating fibrositis requires a careful consideration of all possible factors. Vigorous massage and physiotherapy undoubtedly relieve many early and acute cases. In chronic cases, search must be made for underlying causes and treatment directed appropriately. At present, more importance attaches in America to psychogenic rheumatism than in this country. The war has vastly increased appreciation of psychosomatic medicine. It has also brought psychiatric training and experience to a great number of practitioners. There is hope that a nationally available specialist psychiatric service will grow after the war. This will do much to relieve both practitioners and patients of their wearisome burden of fibrositis.

Medicine and the Armed Forces

HOSPITAL RESIDENCIES UNDER THE G. I. BILL

This statement by a subcommittee on veterans' affairs of the Committee on Postwar Medical Service was compiled for the information of approved residency hospitals and physician veterans by that subcommittee, the Council on Medical Education and Hospitals and the Bureau of Legal Medicine and Legislation of the American Medical Association. The provisions of the amended Servicemen's Readjustment Act are included. The statement has been approved for publication by the Central Office of the Veterans Administration.

1. *Eligibility of Hospitals.*—On Nov. 9, 1945 the chairman of the subcommittee on veterans' affairs of the Committee on Postwar Medical Service of the American Medical Association submitted for the consideration of the Administrator of Veterans' Affairs the question as to whether payment of tuition can be made to hispitals which furnish physician veterans advanced hospital education beyond internship. In the letter it was stated that the instruction to be furnished to the physician veterans should be regarded as an educational program, as distinguished from "on the job training," for the reason that it involves organized teaching on rounds and in conferences as well as classroom conferences dealing with autopsy findings, medical problems in the hospital, x-ray diagnosis, laboratory studies and other organized educational features which definitely stamp this training as education. It was also stated that such a program of instruction entails expenditures by the hospitals which would be unnecessary if patient care alone were involved and that the services of additional physician teachers would be required in order to provide the necessary instruction.

In reply to this letter from the chairman of the subcommittee of the Committee on Postwar Medical Service, the Administrator of Veterans' Affairs ruled that ". . . the training contemplated in connection with residencies and fellowships is not 'training on the job' . . . but is in the nature of institutional training." This applies to all acceptable residency hospitals, whether or not they are affiliated with a medical school. The ruling means that otherwise qualified physician veterans pursuing the contemplated training in connection with residencies or fellowships are eligible for subsistence benefits and that approved hospitals are eligible to apply for tuition remuneration. (See section 6.)

2. *State Approval of Hospitals.*—Although the Veterans Administrator has established the general principle that hospitals conducting acceptable residencies are eligible for participation under the bill, it is still necessary for each residency hospital to seek approval as an individual institution from the appropriate state agency. The law requires the governor of each state to designate an authority in each state to approve educational institutions. In most states this agency is the Office of Education, by whatever name it may be called. A revised list of these agencies for all the states is given in section 10. No hospital can participate unless it is approved by the state agency; veterans receive no subsistence allowance

while serving as residents in a hospital not so approved.

It is the responsibility of these state agencies to see that only institutions offering education of a high quality be certified for participation, as a protection to the veteran.

3. *Eligibility of Veterans.*—Honorably discharged physician veterans of this war are eligible for educational benefits for a period of time equal to one year plus the duration of their active duty since Sept. 16, 1940, and prior to the termination of the war, not including time spent on active duty in the A. S. T. or Navy V-12 programs, and not to exceed a total period of four years. It is no longer necessary for the veteran to demonstrate that his training was interrupted by the war, regardless of his age when entering active duty. The period of training must be commenced within four years of discharge, or the termination of the war, whichever is later, and completed within the nine year limitation. In no case may the period of education exceed four years.

4. *Establishment of Eligibility.*—It is necessary for the veteran to establish his eligibility formally. This he does by filing an application on Veterans Administration Rehabilitation form 1950 at the regional office (see section 11) of the Veterans Administration. A certified copy of his discharge or a photostatic copy of his discharge should accompany the application. From the regional office the veteran receives a Certificate of Eligibility and Entitlement (Veterans Administration form 1953), which indicates the duration of the training to which he is entitled. This certificate must be endorsed by the approved hospital and forwarded to the regional office of the Veterans Administration. Benefits cannot be paid unless and until this process is complete. It is important for the veteran to make certain that the hospital has been approved by the appropriate state agency (see sections 2 and 10). It is also to the veteran's interest to make certain whether the hospital is also approved by appropriate nongovernmental approving agencies, lest the work done proves later to be useless for such special purposes as certification by one of the American Boards in the medical specialties.

5. *Subsistence Allowance.*—The veteran then receives a monthly subsistence check for $65 if without dependents or $90 per month if he has a dependent or dependents. These payments will not be made during terminal leave. Public Law 268, approved Dec. 28, 1945, repeals section 1505 Public Law 346 reading in part as follows: "In the event there shall hereafter be authorized any allowance in the nature of adjusted compensation, any benefits received by, or paid for, any veteran under this act shall be charged against and deducted from such adjusted compensation."

6. *Payments to Hospitals.*—The law and Veterans Administration regulations make special provisions for payments to educational institutions having no established tuition fee. These apply to approved residency hospitals, which rarely if ever have an established tuition fee; in fact, some participating hospitals will provide a modest stipend to the veteran and may even provide facilities for living in the hospital as part of his training, in which case the other provisions of this statement still apply. Regarding payments to hospitals, there are four alternatives available to hospitals:

a. The hospital may request no payments; this does not affect subsistence payments to veterans.

b. The hospital may have a regularly established tuition fee, which it may request from the regional office of the Veterans Administration for its resident veterans; this would usually be limited to some university or medical school hospitals offering fellowship or graduate work including residency training.

c. Hospitals may avail themselves of the regulations in Veterans Administration instruction No. 6, Title II, Public Law 346, amplified in conferences with the Veterans Administration. Any approved educational institution that has no established tuition fee or whose established tuition is considered inadequate compensation may charge for each veteran enrolled in a full time course as much as $15 per month, $45 per quarter or $60 per semester. In residency hospitals the length of the course of instruction is fifty-two weeks (including vacation), which does not fall within the Veterans Administration definition of an ordinary school year, as a period of thirty to thirty-eight weeks. Residency hospitals selecting this basis of compensation would be paid $15 per month, or $180 for a course of fifty-two weeks. This alternative will probably

apply to most hospitals desiring tuition remuneration.

d. A hospital that has no established tuition or that considers its established tuition charges to be inadequate compensation and desires payments in excess of that described in section 6 (c) may, in accordance with the provisions of Veterans Administration instruction No. 6, be paid fair and reasonable compensation not exceeding the estimated cost of teaching personnel and supplies for instruction. Hospitals desiring compensation on this basis will be required to submit through the manager of the regional office to the Assistant Administrator for Vocational Rehabilitation and Education, Veterans Administration, Washington, D. C., information on cost of teaching personnel and supplies for the courses of instruction. Information will also be required as to the value of services rendered by the residents and fellows to the institution. The value of such services must be offset under this basis of compensation against any costs for teaching personnel and supplies incurred in giving the courses in question. Medical school hospitals especially may wish to follow this alternative for fellowships involving residency training, when there is no established tuition fee for such work.

Note that it is only in connection with section 6 (d) that it is necessary for the hospital finally to deal directly with the Central Office of the Veterans Administration in Washington. In all other negotiations described in this statement the hospital as well as the veteran deal with local authorities: the regional office of the Veterans Administration or, initially, with the state agency which approves educational institutions.

7. *Responsibility of Hospitals.*—It is the responsibility of every participating hospital to maintain an educational program of high quality, fulfilling established and generally accepted standards for such work. No hospital is justified in embarking on or continuing residency programs unless these are acceptable not only under the law but professionally as well.

8. *Terminal Leave Period.*—An eligible physician veteran may embark on any educational program within the provisions of the act during his period of terminal leave. During this period of time tuition payments can be made to the approved educational institution to the same extent that they may be made after the medical officer's discharge. However, subsistence payments will not be paid to the veteran during the terminal leave period.

9. *Short Intensive Postgraduate or Training Courses of Less than Thirty Weeks.*—Institutions providing review and refresher courses of less than thirty weeks, having regularly established fees, must be approved by the appropriate state agency (see section 10) and must arrange for tuition payments with the regional offices of the Veterans Administration (see section 11). The veteran must establish his eligibility for this work as described in section 4. The fee can be charged, provided the cost is not in excess of the rate of $500 for a full time course for an ordinary school year. If the customary charges are in excess of the rate of $500 for an ordinary school year the Veterans Administration must find that the agreed cost of such courses is reasonable and fair. However, for review and refresher courses there will be charged against the veteran's time period of eligibility the proportion of an ordinary school year which the cost of the course bears to $500. For example, if an eligible veteran elects a two month course for which $250 is paid, there will be charged against the veteran's period of eligibility for training, not two months, but a half of an ordinary school year, since $250 is half of $500.

By taking such a review or refresher course the veteran does not forfeit the right for further education, within the limits of the period of eligibility for instruction for which he has been certified.

10. *State Approving Agencies.*—The state agency to which hospitals should apply for approval as educational institutions in Illinois is Springfield, Illinois, Office of Public Instruction, Mr. Vernon L. Nickell.

11. *Regional Veterans' Offices.*—The regional offices of the Veterans Administration and veterans' centers having regional office activities are listed here with the name of the manager of the regional office. It is highly important that each participating hospital become well acquainted with its own regional office, its manager and its policies and procedures. It is to this office that the hospital transmits the endorsed Certificate of Eligibility and Entitlement of the resident veteran and presents its claim for remuneration. It is from this office that the hospital and the

veteran receive payments. In Illinois this is the office of Mr. Charles G. Beck, Hines.

Subcommittee on Veterans' Affairs of the committee on Postwar Medical Service.

Frederick A. Coller.
J. W. Holloway Jr.
Victor Johnson.
Alphonse M. Schwitalla, Chairman

DEPARTMENT OF MEDICINE AND SURGERY IN THE VETERANS ADMINISTRATION

The Veterans Administration will be able to offer more attractive opportunities to doctors, dentists, and nurses interested in helping care for veterans with President Truman's signing of H. R. 4717, a bill to establish a VA Department of Medicine and Surgery.

VA officials estimate they need approximately 1,125 doctors, 1,200 nurses and 100 dentists to fill present vacancies. Additional positions will open as Army and Navy personnel at VA establishments are released from active duty.

The new act sets up a Department of Medicine and Surgery under a Chief Medical Director to replace the present VA medical set-up under the Civil Service. This act will bring professional personnel into an organization comparable with the Army and Navy Medical Corps and the U. S. Public Health Service. VA officials hope that higher salaries and better professional advantages will attract a sizeable percentage of the thousands of high grade doctors, dentists and nurses being released from the armed services.

So acute has the shortage of personnel become in VA hospitals and homes that some activities have had to be curtailed and the transfer of seven Army hospitals earmarked for transfer to VA has been hampered.

The new medical department set-up will permit VA to employ applicants promptly to meet the present emergency situation as well as to evaluate and grade all doctors, dentists and nurses on the basis of their professional qualifications.

Among the major provisions of the new act, besides setting up a medical department outside Civil Service, are the following:

(1) Specialists certified by VA will be paid 25 per cent more salary up to a ceiling limit of $11,000 a year.

(2) Residencies will be set up in VA hospitals where younger doctors may study to qualify as specialists. This will mean that veterans will be able to obtain the most up-to-date medical treatment — the same kind as if they were admitted to hospitals connected with the nation's leading medical schools and centers.

(3) Promotions will be made on recommendations of special VA boards which, in general, compare with the "selection boards" operating in the Army and Navy for higher ranking officers.

(4) Through the establishment of appointment, promotion and disciplinary boards, the legislation will permit VA to have complete supervision of its own professional employees, based upon their professional competence.

In order to overcome the acute personnel shortage, Major General Paul R. Hawley, Acting VA Surgeon General, who is expected to become Chief Medical Director under the new set-up, will need additional professional workers if he is to carry out his plans to give VA one of the most progressive medical programs in the nation.

In the effort to provide the veterans with the best service obtainable, outstanding authorities in specialized medical fields have been appointed to assist General Hawley in establishing high standards of care for disabled veterans. These physicians are serving as consultants. In addition to advising VA, they will nominate leaders in their respective medical and surgical specialties who will be consultants in the 13 Branch areas of the United States to supervise in carrying out professional policies.

Close association with lay medical associations and teaching centers will assure modern scientific medicine in VA establishments, officials pointed out. Employees in the medical department will work with these outstanding specialists.

"Service with the VA offers professional opportunities comparable with the best, not only for qualified specialists but also for those who seek a future in an organization that is committed to the highest principles in American medicine," General Hawley said.

The Administrator of Veterans Affairs, General Omar N. Bradley, will establish the regulations which will replace the Civil Service rules which formerly governed VA professional personnel. The program now coming into operation

was first advocated by VA executives in 1922.

Both Generals Bradley and Hawley have advocated the change to a medical department as a means of obtaining the best doctors, dentists and nurses to treat veterans. They advocated extra pay for specialists, the establishment of residencies in VA hospitals, and the right of complete supervision over employment and separation of this class of VA employees on a basis of professional competence. The new act includes all three of these features.

The act approved by President Truman establishes the following divisions under the Chief Medical Director:

(1) Office of Chief Medical Director. The director will be paid a salary of $12,000 a year. A Deputy Medical Director will receive $11,500 and Assistant Medical Directors — not to exceed eight in number — will be paid $11,000 each.

(2) Medical Service.

(3) Dental Service.

(4) Nursing Service. The Director of Nursing Service will receive $8,000 annually and a Deputy Director, $7,000.

(5) Auxiliary Service. A chief pharmacist, chief dietitian, chief physical therapist, and a chief occupational therapist in the Auxiliary Service will be paid $6,000 annually. While the heads of the technical groups are appointed by the Administrator outside of Civil Service, the technicians working under them will continue to be chosen through existing Civil Service regulations. The act provides that the salary range for hospital attendants shall be $1,572 minimum to $1,902 maximum. The former pay scale provided for two grades at approximately these same salaries.

Appointments of key executives will be for a four year term, subject to removal by the Administrator for cause. Re-appointment will be for the same term.

Doctors, dentists, nurses and technicians now employed by the VA will be continued on their present jobs pending determination of their qualifications for appointment in the new medical department.

Another provision of the act which will permit professional improvement of VA medical personnel will allow up to five per cent of such employees to study or do research work for periods of time up to 90 days. This will enable doctors, dentists, nurses and technicians to attend recognized schools or work with the U. S. Public Health Service or other research groups. Officials pointed out that this would enable workers to keep abreast with the very latest developments in their respective fields.

Although they are not subject to selection or promotion by Civil Service, the members of the new VA Department of Medicine and Surgery will be under the Civil Service Retirement Act of 1920 and will receive its benefits.

Other hospital employees in VA hospitals not covered by the new act will continue to be appointed through the Civil Service channels which formerly governed their selection and promotions.

Initial appointments in the higher grades, VA officials explained, may be made for those qualified because of graduate training and professional experience.

The grades and annual full-pay ranges of the positions established by the new legislation are as follows:

MEDICAL SERVICE

Chief grade, $8,750 minimum to $9,800 maximum

Senior grade, $7,175 minimum to $8,225 maximum

Intermediate grade, $6,230 minimum to $7,070 maximum

Full grade, $5,180 minimum to $6,020 maximum

Associate grade, $4,300 minimum to $5,180 maximum

Junior grade, $3,640 minimum to $4,300 maximum

DENTAL SERVICE

Senior grade, $7,175 minimum to $8,225 maximum

Intermediate grade, $6,230 minimum to $7,070 maximum

Full grade, $5,180 minimum to $6,020 maximum

Associate grade, $4,300 minimum to $5,180 maximum

Junior grade, $3,640 minimum to $4,300 maximum

NURSING SERVICE

Assistant Director, $5,180 minimum to $6,020 maximum

Senior grade, $4,300 minimum to $5,180 maximum

Full grade, $3,640 minimum to $4,300 maximum

Associate grade, $2,980 minimum to $3,640 maximum

Junior grade, $2,320 minimum to $2,980 maximum

★ ★

VETERANS ADMINISTRATION SEEKS MORE ARMY HOSPITALS

Major Gen. Paul R. Hawley, acting Surgeon General of the Veterans Administration, reveals that the agency will be able to use more of the armed forces surplus hospitals. Of sixty declared surplus by the Army and Navy, General Hawley and Veterans Administrator Omar Bradley have accepted only eight. The others were deemed of temporary construction or located too far from medical centers. Hawley reports that the shortage of hospital beds is becoming increasingly serious, resulting more from a lack of personnel rather than a shortage of hospital facilities.

General Bradley has informed a Negro delegation that he will make an effort to end segregation of Negroes by the Veterans Administration. Previously he had told Negroes that the agency must follow local custom.

★ ★

ILLINOIS DOCTORS AWARDED MILITARY DECORATIONS

Major Walter W. King

Major Walter W. King, formerly of Peoria, Ill., was recently awarded the Bronze Star medal at Winter General Hospital, Topeka, Kan., where he is now stationed as chief of the surgical service. The citation accompanying the award emphasized his "meritorious service in connection with military operations against the enemy as surgeon, general surgical team No. 5, third auxiliary surgical group, from June 6, 1944 to October 16, 1944, in France and Belgium. Although the arrival of medical equipment and supplies was delayed during the landing of his surgical team on the invasion beach on D day, Major King, displaying outstanding initiative and marked professional ability, organized his group and gave immediate treatment to battle casualties. During subsequent operations he displayed tireless effort and worked many hours each day to bring expert medical service to seriously wounded patients." Dr. King graduated from Northwestern University Medical School, Chicago, in 1930 and entered the service Aug. 26, 1942.

Captain Seymour Hershman

Capt. Seymour Hershman, formerly of Chicago, was recently awarded the Bronze Star "for meritorious service in connection with military operations against an enemy of the United States during the period July 17, 1944 to April 28, 1945. Captain Hershman, serving as assistant to chief of surgical service, 109th Evacuation Hospital, distinguished himself by his outstanding performance of duty. The high degree of professional skill he displayed, his resourcefulness and loyal, untiring devotion to duty reflect great credit on himself and the military service." Dr. Hershman graduated from the Chicago Medical School in 1942 and entered the service Oct. 6, 1942.

Major Wesley B. Oliver

Major Wesley B. Oliver, formerly of Belvidere, Ill., was recently awarded the Bronze Star for a "display of fine administrative ability, indefatigable energy and tireless devotion to duty, all of which were of inestimable value in the prompt and efficient evacuation of Third Army casualties." Dr. Oliver graduated from Northwestern University Medical School, Chicago, in 1936 and entered the service Sept. 2, 1942.

Lieutenant Colonel William T. Holladay

The Legion of Merit was recently awarded Lieut. Col. William T. Holladay, formerly of Dixon, Ill., for "meritorious service and bravery, particularly in the 37th Division's campaign in Manila." Dr. Holladay graduated from Northwestern University Medical School, Chicago, in 1931 and entered the service March 15, 1941.

Major Samson D. Entin

Major Samson D. Entin, formerly of Chicago, was recently awarded the Bronze Star "for meritorious service with the 65th Infantry Division in France, Germany and Austria for the period March 5 to May 8, 1945." Dr. Entin graduated from Loyola University School of Medicine, Chicago, in 1936 and entered the service March 5, 1941.

Captain Martin M. May

Capt. Martin M. May, formerly of Marion, Ill., was recently awarded the Bronze Star and the Meritorious Service Unit Plaque. Dr. May graduated from the St. Louis University School of Medicine in 1938 and entered the service Oct. 7, 1942.

News of the State

PERSONALS · COMING EVENTS · MARRIAGES · DEATHS

ADAMS

Alfred Ash has returned to Quincy to the practice of medicine having been recently discharged from the U.S.Medical corps. He has been appointed chief medical officer at Illinois Soldiers' and Sailors' home.

Harry G. McGavran formerly of Chicago has established his residence in Quincy and will be connected with the Physicians and Surgeons clinic.

BUREAU

At the recent meeting of the North Central Illinois Medical Association's annual meeting held in Princeton, the following officers were elected: Dr. E. S. Murphy of Dixon, president, Dr. J. M. McCuskey, Peoria, first vice president, Dr. M. A. Nix, Princeton, second vicepresident, Dr. G. A. Dicus, Streator, secretary-treasurer. Dr. K. M. Nelson of Princeton, retiring president, was elected to the board of trustees.

CHAMPAIGN

At the annual election meeting of the Champaign County Medical Society held December 7th, the following officers were elected: Dr. C. S. Bucher, Champaign, president; Dr. L. M. Stilwell, Champaign, vice-president; Dr. J. D. McKinney, Champaign, secretary-treasurer.

J. B. Gillespie has returned to the Carle clinic after three years of army service.

COOK

On December 10th the first reunion of Oak Park Physicians Club took place. Among those present who have recently returned from service were: Comdr. J. R. Boyd, Col. W. J. Potts, Col. R. F. Sharer, Col. H. A. Sofield, Col. H. E. Swantz, Comdr. P. C. Waldo, Capt. C. M. Pohl, Comdr. J. C. McMillan, Comdr. H. H. Stephens, Dr. R. H. Newell and Capt. H. Santaro.

Charles B. Huggins, professor of urology at the University of Chicago since 1927, has accepted the position of director of the department of urology at the Johns Hopkins school of medicine, Baltimore, Md., and director of its Brady Urological institute.

Comdr. Frank E. Nagel expects to return to private practice in Chicago after having served in the U. S. Navy for 44 months.

A. C. Peterson has returned to civilian practice after having served in the Navy since April 1941.

Major Verne Swigert, veteran of 3½ years with the army medical corps, recently was given his discharge and has returned to his practice in Evanston.

Joseph Fireman, former Chicago doctor, who has received his release from the service, has opened office in Northfield for the general practice of medicine.

Leo A. Kiplan, recently discharged from the Army, has resumed his former position as assistant director of the Cook County Behavior Clinic. He also has assumed the assistant professorship in the nervous and mental disease department of Loyola University, a position which he held before the war.

Charles T. Roe has returned to private practice after spending three years in service in the medical corps.

W. E. G. Johnson has returned to civilian practice after spending 17 months in England in the armed service. While in England he specialized in orthopedics.

Manuel Goldfine, recently separated from service, has opened his office again for private practice.

Wm. McManus has returned from the army after three years service with the Third Air Force and opened a new office in Oak Park.

Capt. Elmer Albers formerly of Lemont has received his discharge from the Army. Future plans are indefinite.

Francis J. Sazama has announced his return from military service and the establishment of his new office in Riverside.

Major Emil J. Bunata, recently returned from military service, has resumed his duties as health director of Berwyn.

Word has been received from Cmdr. Harold H. Hill, who has been attached to the Medical Battalion, 1st Marine Division, that they are now stationed in Tientsin, China. Cmdr. Hill states they have a fairly modern 400 bed hospital which they are busily engaged in staffing.

Truman D. Schertz, discharged recently, has returned to the practice of medicine in Prospect Hts.

Jerry Kearns, chief pathologist in the Cook county coroner's office until he entered active service in the navy in 1940, returned to his peace time work after his release from service.

A gift of $4,000 was presented to the cancer research division of Michael Reese hospital by the Daisy Schwimmer Foundation.

At the annual meeting of the board of governors of the Institute of Medicine of Chicago, December 12, the following officers were elected for the coming year: Drs. William F. Petersen, chairman of the board of governors; Ernest E. Irons, president; Percival Bailey, vice president; George H. Coleman, secretary; Grant H. Laing, treasurer. Dr. Italo F. Volini was elected a member of the board of governors for a term of five years.

The fifteenth floor of the Ward Memorial Building, Northwestern University Medical School, is now under construction for the housing of experimental animals. The equipment will be the most modern type, with air conditioned and temperature controlled rooms, stainless steel cages and tile walls and floors. One wing will have animal quarters to be used principally for receiving and housing dogs; the other wing is to have rooms which will be occupied by the Institute of Neurology and other departments that use animals for experimental purposes. The wing on the fourteenth floor, vacated through the addition to the new floor, will be used by the department of experimental medicine.

Drs. John A. Wolder and Karl A. Meyer, both associate professors of surgery at Northwestern University Medical School, were recently promoted to professors of surgery.

On January 2nd eighty-three new physicians and surgeons began their duties at Hines hospital in a move to supply veterans' hospitals with the same caliber of medical care as patients received in private hospitals.

Cmdr. George G. Fischer, placed on inactive duty, has established the practice of medicine in Wilmette.

Charles E. Boylan after three years of service with the U.S. Navy has opened offices again in Chicago.

Hugo Long, Chicago Heights physician now in the Navy Medical Corps has been promoted from lieutenant commander to commander.

Louis Greenspon has returned to Chicago Heights and reopened his office for private practice. Dr. Greenspon was in service more than three years, two of which he spent in the Pacific area.

DU PAGE

Arthur S. Webb of Wheaton has become president of the Du Page Family Service Association, a volunteer agency which gives counsel in personal and family problems.

G. A. McGuinness has reopened his office in West Chicago for the practice of medicine.

Clarence B. Wyngarden has returned to Wheaton to resume his practice after serving 23 months in the Army Medical Corps.

Major L. J. Kunsch has returned to Naperville and resumed his practice as physician and surgeon.

EFFINGHAM

Lt. Col. W. J. Gillesby, Effingham has returned home after 38 months of service. He has no immediate plans.

FRANKLIN

Captain Marion A. Turner has returned to Christopher to resume his practice about Feburary 1.

GREENE

At the Quarterly meeting of the Greene County Medical Society the following officers were elected for 1946: Dr. A. D. Wilson, President; Dr. R. W. Piper, Vice President; Dr. W. H. Garrison, Secretary; and Dr. A. K. Baldwin, Censor. Drs. George L. Drennan and W. H. Newcomb of Jacksonville, were the speakers.

HANCOCK

Jay D. Trotter on terminal leave after medical service with the armed forces, has opened offices in Carthage and resumed his practice.

HENRY

T. B. Carney of Kewanee has been elected president of the Kewanee Physician's club at their annual meeting held in December.

JACKSON

Lt. L. J. Brown, former Carbonale physician, who has been stationed in Pearl Harbor for the past 18 months has been detached from duty and reassigned to the continental United States. When he receives his discharge from the Navy, he expects to resume his medical practice in Carbondale.

Major Ellis R. Crandle, has been relieved from active duty with the Army and has returned to Carbondale where he expects to resume practice around the first of the year.

JEFFERSON

At the December meeting of the Jefferson-Hamilton County Medical meeting, Rev. Alphonse M. Schwitalla, Dean of the St. Louis University Medical School, St. Louis, was the guest speaker.

KANE

Emil K. Mosny has returned to his practice in St. Charles after serving with the Navy medical department in the Pacific.

Gerald L. Sharrer has returned to Aurora and resumed his practice of medicine after 22 months of service with the Navy in the Pacific area.

KENDALL

Ray F. Crawford expects to establish the practice of medicine in Plano as soon as he is released from the Navy. He will be associated with Dr. R. A. Schaefer.

KNOX

John P. Graham, recently discharged after three years of service with the Army Medical corps, has opened an office in Knoxville.

LA SALLE

Rollin S. Moore has resumed his practice of medicine in Streator after an absence since November 1941 when he enlisted for service.

LAWRENCE

L. W. Frame health officer for the countries of Lawrence, Wabash and Edwards has resigned to accept a position with the Farm Security Administration in the Reserve U.S. Public Health Service. He will be located in Dallas, Texas.

LEE

Edward Murphy, who has spent several years in the service is expected home in February to resume his practice and again be associated with his brother, Dr. David Murphy.

MC HENRY

William J. Copeland has resumed his practice of medicine in Cary and hopes to open an office in Fox River Grove as soon as feasible.

Lt. Col. W. H. Newton has returned to Woodstock after six years of active duty with the Army. He is associated with Dr. A. S. Romberger and returned to the practice of medicine.

MC LEAN

The following doctors have resumed their practice of medicine in Bloomington after having been discharged from the Navy and Army: Dr. W. G. Ball, Dr. C. A. Conklin, Dr. Robert G. Price and Dr. Sidney S. Schochet.

MACON

Forrest R. Martin has returned to Decatur after serving more than four years in the armed forces and resumed his practice of medicine.

MACOUPIN

W. W. Lusk expects to reestablish his practice in Carlinville about the first of February.

MADISON

John H. Wedig has established his offices in Alton after having spent almost three years in the armed service.

M. L. Metro has returned to Alton after two years of service and has opened offices for the practice of medicine.

The Alton Medical Society elected the following officers for 1946: J. B. Hastings, president; Everett R. Quinn, vice-president; Dewey Roberts, secretary and Mather Pfeiffenberger, treasurer.

MORGAN

At the regular meeting of the Morgan County Medical Society held in December A. W. Burke of the Communicable Diseases, Illinois Department of Public Health, discussed tropical diseases. Dr. Burke has just returned to Springfield after a long service in the South Pacific.

Alfred G. Schultz has returned to Jacksonville to practice medicine after spending 44 months in the armed forces.

PEORIA

The following Peoria doctors have returned from the armed forces and reestablished their practice of medicine: Wilbur L. Bowen, Frank A. Christensen, Robert K. Dean, G. M. Frye, Richard R. Martin, J. M. McCuskey, G. M. Parker and Robert Rutherford.

The Peoria Medical society has elected the following officers: C. W. Margaret, president: Robert M. Sutton, vice-president: Walter E. Owen, reelected secretary-treasurer.

St. Francis Hospital in Peoria recently installed an x-ray unit in connection with its admitting office, becoming the first hospital in Illinois to establish such medical service. The equipment was purchased by the Peoria County Tuberculosis Association from Seal Sale funds, and was placed in St. Francis Hospital because it is the largest in the city and has a greater admittance.

The purpose of the unit is to x-ray on admittance the chests of all patients 15 years or over.

RANDOLPH

The Randolph County Medical Society held a scientific meeting on December 13th. Guest speakers were Drs. W. H. Walton and G. C. Otrich both of Belleville.

RICHLAND

At a meeting of the Olney Rotary Club in December Dr. B. A. Weber gave an interesting discussion of the part army physicians played in both the Pacific and the European war theatres.

ROCK ISLAND

At the December meeting of the Rock Island County Medical Society three recently discharged service men were elected to offices. Dr. Rolland O. Sala of Rock Island was elected president: Dr. Clarence S. Costigan of Moline, first vice president, and Dr. George K. Cook of East Moline, second vice president. Reelected officers were Drs. Norbert C. Barwasser, secretary and Phebe Pearsall Block of Moline, treasurer.

ST. CLAIR

At the December meeting of the St. Clair County Medical Society, John C. Soucy was designated president-elect of the Society. Olin B. Boyd was installed as the 1946 president; Willard Scrivener, vice-president; Frank Bihss, secretary.

Edward G. Dewein, Freeburg, has been installed as president of the Belleville branch of the St. Clair County Medical Society with the other officers as follows: C. L. Martin, president-elect, H. P. Dexheimer, vice-president; G. C. Otrich, secretary; Edmond Bechtold, treasurer.

Col. John E. Roberts has been assigned base surgeon of the Army Air Forces Regional Hospital at Scott Field.

Walter S. Broker, formerly of Minnesota, has been appointed Medical Director and Superintendent of the Pleasant View Sanatorium in East St. Louis, succeeding Dr. Robinson Bosworth who has returned to private practice in Rockford. He assumed his duties at the sanatorium on December 11.

SALENE

A. C. Tobey has returned from service in the Army Medicial Corps and reopened his office in Broughton.

John Elder Choisser has been released from the Navy Medical Corps and has opened his office for the practice of Medicine and Surgery in Eldorado.

SHELBY

Duncan Biddlecombe has resumed the practice of medicine in Shelbyville after more than three years in the armed forces.

UNION

O. J. Burroughs recently discharged from the Army has opened an office in Dongola for the practice of medicine.

VERMILION

B. M. Jewell and F. M. Clark were named presidents of the medical staffs at the Lake View and St. Elizebeth Hospitals for this year.

John C. Mason has returned to civil practice in Rossville after having spent three years in the Army Medical Corps.

Henry P. Lattuada of Westville has established offices in Danville and will specialize in the practice of obstetrics and gynecology. He was in the armed service for 4½ years.

At the January meeting of the Vermillion County Medical Society returned Army and Navy Officers of the Society spoke on their experiences while in the Armed Services.

WILL

Cmdr. Campbell Carey of Joliet returned to private practice January 2nd having been released from the Navy after three years of service.

WINNEBAGO

Two Rockford surgeons, Dr. Curt Steffen and Dr. T. Arthur Johnson were awarded fellowships in the International College of Surgeons at the annual assembly meeting in Washington during December.

George W. Nelson has opened his office in Durand for the practice of medicine after having been in the armed forces and released.

J. Stuart Moffatt has opened an office in Rockford for the practice of general medicine. He had been in the service for four and one-half years, part of which was spent in the Pacific area.

DEATHS

Walter H. Allyn, Waverly. Barnes Medical College, St. Louis 1902. Had been mayor of Waverly as well as practicing physician. Died January 3rd. Age 70.

Adolphus E. Bertling, Chicago. Rush Medical College 1895. Practiced medicine many years in Chicago. Member emeritus of the Chicago and Illinois Medical Societies. Died January 6th. Age 80.

Carl E. Black, Jacksonville. Northwestern Univ. Medical School 1887. Former president of the Illinois State Medical association and widely known physician. Died January 13th. Age 83.

Mat Bloomfield, Joliet. Rush Medical College 1912. Was chief of staff at the Silver Cross Hospital, a staff member at St. Joseph's Hospital and president of the Will County Tuberculosis Prevention Association. Died January 6th. Age 58.

Leon M. Bowes, Chicago. Rush Medical College 1903. Staff member of the Swedish Covenant for many years. For the last 25 years had volunteered his services as house physician at the Norwegian Old People's Home in Norwood Park. Died December 24th. Age 67.

Edwin H. Bradley, Peoria. University of Vermont College of Medicine 1891. Practiced as an eye, ear, nose and throat specialist for more than 40 years. Member of the St. Francis hospital staff and former president of the staff. Died December 23rd. Age 84.

Theodore W. Brown, Marissa. University of Illinois Medical College 1940. Suffered fractured skull and multiple injuries from a fall. Had served 19 months in the Army Medical Corps, 10 months of which had been spent in New Guinea, Figi Islands, New Caledonia and Australia. Died December 3rd. Age 35 years.

Lorin C. Collins III, Chicago. Northwestern University College of Medicine 1900. Former associate professor of obstetrics at Rush Medical College member of the staff of Grant hospital. Had practiced medicine in Chicago 45 years. Died December 25th. Age 69.

Charles C. Clark, Chicago. University of Illinois College of Medicine 1905. Physician in Chicago for forty years. Died December 28th. Age 66.

K. L. Hayes, Farmersville. University of Illinois College of Medicine 1906. Member of the staff of St. Francis hospital in Litchfield and St. John's and Memorial hospitals in Springfield. Suffered a heart attack. Died December 14th. Age 63.

A. R. Lyles, Virginia. College of Physicians and Surgeons, St. Louis, 1890. First president of the Cass County Medical Society. Elected mayor of Virginia in 1901. Died December 18th. Age 84.

Wm. Lingard, Chicago. Chicago College of Medicine and Surgery 1913. Died January 13th. Age 55.

Alvin S. Loseff, Chicago. University of Illinois College of Medicine 1932. Army Lieutenant. Age 39.

George W. Mauzey, retired, Findlay. Hospital College of Medicine, Louisville, 1893. Member of the "Fifty Year Club". Practicing physician in Findlay for over fifty years. Died January 2nd. Age 83.

Gerald McShane, Spring Valley. Loyola University School of Medicine 1921. Former chief medical director at the Green River ordnance plant in Dixon. Died January 11th. Age 62.

John H. O'Neil, Chicago. Illinois Medical College 1904. Member of Evangelical Hospital for 25 years. Died December 20th. Age 63.

E. V. Rice, Polo. Kentucky School of Medicine 1894. Retired. Died December 23rd, following a stroke. Age 86.

Fred Rudnick, Chicago. University of Illinois College of Medicine 1905. Physician in Chicago for 42 years. Died December 21. Age 71.

Walton Tackett, East Moline. Barnes Medical College 1907. Psychiatrist at the East Moline State Hospital since 1921. Died December 14th. Age 66.

T. H. Thomson, retired, formerly of Moline. University of Western Ontario Medical School 1905. Died at Kingsmill, Ontario, December 4th. Age 67.

Gertrude F. Thompson, Chicago. University of Illinois College of Medicine 1903. Staff member of Women's and Children's Hospital for over 30 years. Died December 29th. Age 81.

Frank X. Walls, retired, formerly Chicago. Northwestern University Medical School 1891. Professor Emeritus of Pediatrics Northwestern University Medical School. Died in Fort Lauderdale, Fla. January 14th. Age 76.

Charles J. Young, Danville. Jenner Medical College 1904. Died December 5th. Age 66.

Augustus G. Zimmerman, Chicago. University of Strassbourg 1899. Associate clinical professor of surgery at Loyola University. Died December 19th. Age 67.

P. R. N.

The Jocular Jingles of C. G. F.

by

Charles G. Farnum M. D.
Peoria, Ill.

PIRATES

In ancient times, in southern climes,
Along the Gulf Coast water,
The pirates stayed, and fought and played,
And lived a life of slaughter.

These bucaneers put grewsome fears
In every town and village,
A savage crew, blood-thirsty too,
They'd smuggle, sack and pillage.

The ships that sailed quite often failed
To reach their destination;
As vessels sank, crews walked the plank,
To their annihilation.

On every side, both far and wide,
All reeked with blood and thunder;
In those days life was fear and strife,
When bandits loot and plunder.

L'Envoi

The same old pirate spirit dwells
Today. It never stops.
Their sons now run the swank hotels,
Their daughters, antique shops.

AGE OF DISCRETION

We are told there are seven set ages of man
In his journey through life from the cradle to grave,
That in logical sequence are part of life's plan,
To which order of things every one is a slave —
So we look at all men with their virtue and sin,
And we ask where the age of discretion comes in.

Not in infant nor school boy nor youth that we meet,
Nor young manhood with types of behavior we see,
And if middle age tells us that it is discreet,
We just smile to ourselves and ask where it can be;
And old age and senility offer us naught,
Though the age of discretion is earnestly sought.

Though our search be most careful oft nothing is found
That will bolster up hope or offset our despair;
If within or about us discretion abound
It is surely unique and most utterly rare.
So observing the conduct of mankind for years
We still wonder where age of discretion appears.

FUTILITY

What of energy, time and of money
One sees spent by the men every day,
In a futile attempt
To preserve them exempt
From appearance of age and decay.

What a silly assortment of efforts
They resort to belieing their age,
In their manner and clothes,
In their speech and their pose,
Entertainment and sports they engage.

But the calendar cannot be cheated,
Their ridiculous efforts are vain,
The advice of the sage
That a man be his age
Will protect from disgust and disdain.

And the saddest of all of these efforts
In his striving toward youth and its flare,
To look young is the goal
He deceives not a soul,
Is the man who keeps dyeing his hair.

TIES

When a man becomes aged and feeble
And his vision has grown somewhat dim,
When his voice has a squeak
And his heart's a bit weak,
And he's minus his vigor and vim;

In the back of his mind there is lurking
An old lust for the blatant and gay,
So he springs a surprise
In the matter of ties
'Til the rainbow looks murky and gray.

So he wears wild vociferous neck ties
In all colors most gaudy and loud,
They are orange or blue
Or a gorgeous green hue
And of reddest of red he is proud.

While deep purple or pink are his hobby,
And cerise and maroon are divine,
He loves scarlet or rust
Or bright yellow star dust
Or a heliotrope, orchid or wine.

When senility stands in the offing
And his life is but lowering skies,
Don't begrudge him the joy
That he had when a boy
With his frivolous colorful ties.

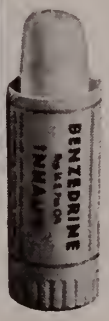
Have fun and relax —
AT THE ANNUAL MEETING
Palmer House, Chicago
May 14, 15, 16



For the symptomatic relief of sinusitis...

"The benzedrine inhaler is an excellent vasoconstrictor and unless overindulged in, it may be used conveniently for long periods without deleterious results." Moore, J. H.: A Resume of Conservative Sinus Management, Southern Med. J. 34: 848-854

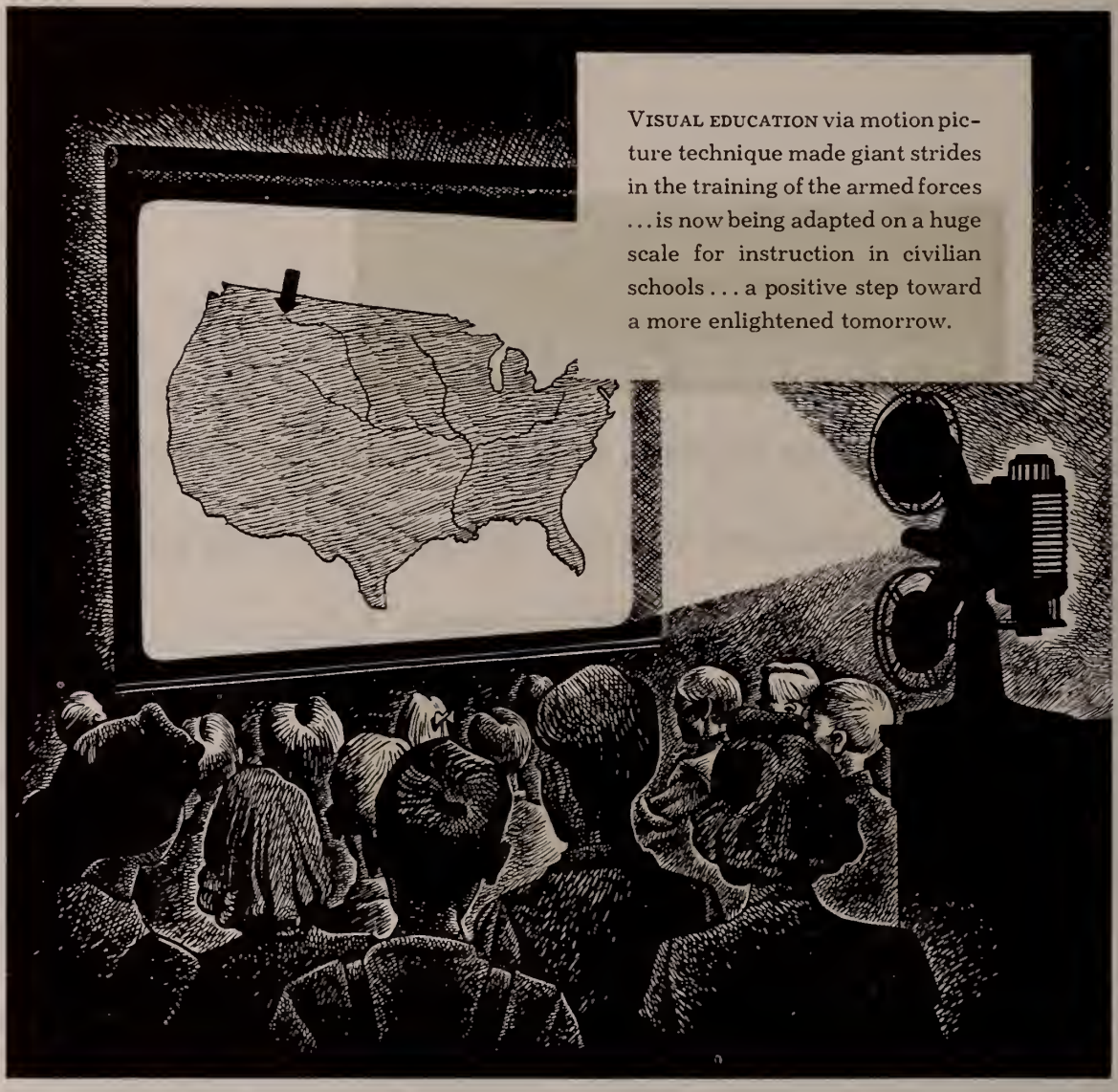
The vasoconstrictive vapor of Benzedrine Inhaler, N.N.R., diffuses evenly throughout the upper respiratory tract, opening sinal ostia and ducts which are frequently inaccessible to liquid vasoconstrictors. The sinuses drain. Headache, pressure pain, "stuffiness" and other unpleasant sinusitis symptoms are relieved. Each Benzedrine Inhaler is packed with racemic amphetamine, S.K.F., 200 mg.; menthol, 10 mg.; and aromatics. Smith, Kline & French Laboratories, Phila., Pa.



Benzedrine Inhaler

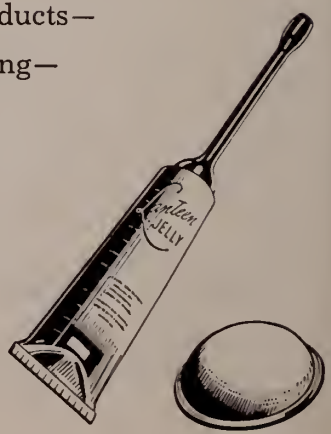
...a better means of nasal medication

Toward a Better World



ANOTHER STEP toward enlightenment and social betterment of tomorrow's world: Lanteen Medical Laboratories present Lanteen products—leaders in their field—a glowing example of forward thinking—produced under the most rigid medical standards.

Since patients are not mechanically minded, simplicity and ease of handling are prime requisites for continued use. Lanteen Flat Spring Diaphragm is extremely simple to place—it is collapsible in one plane only. No inserter required. Distributed ethically—advertised only to the medical profession—available only upon the recommendation or prescription of a physician. Complete information upon request.



L A N T E E N

COPYRIGHT 1946, LANTEEN MEDICAL LABORATORIES, INC. CHICAGO 10

Eye-witness Reports...

IT is one thing to *read* results in a published research. Quite another to see them with your own eyes.

PUBLISHED STUDIES* SHOWED WHEN SMOKERS CHANGED TO PHILIP MORRIS SUBSTANTIALLY EVERY CASE OF THROAT IRRITATION DUE TO SMOKING CLEARED COMPLETELY, OR DEFINITELY IMPROVED.

But may we suggest that you make your own tests?

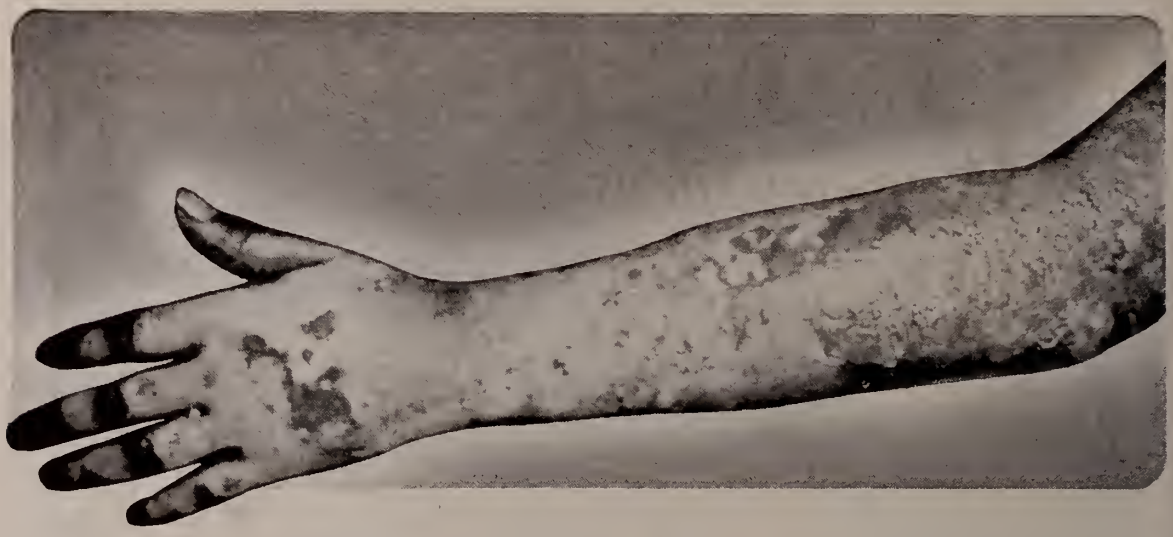


PHILIP MORRIS

PHILIP MORRIS & CO., LTD., INC.
119 FIFTH AVENUE, NEW YORK, N. Y.

*N. Y. State Journ. Med. 35 No. 11,590
Laryngoscope 1935, XLV, No. 2, 149-154

TO THE DOCTOR WHO SMOKES A PIPE: We suggest an unusually fine new blend—COUNTRY DOCTOR PIPE MIXTURE. Made by the same process as used in the manufacture of Philip Morris Cigarettes.



Promotes Healing with Minimal Scarring

THE aim of therapy in severe burns, whether they cover large or small body areas, is to prevent excessive scar tissue deposition and subsequent deformities. Remaining viable epithelial contractures and elements should not be injured. Early epithelization should not be interfered with. Therapeutic measures should be easily and quickly applicable.

Morruguent Ointment readily fulfills these requirements. Its cod-liver-oil concentrate presents a 25 per cent greater content of the unsaponifiable fraction than is contained in cod-liver oil, U.S.P. It is free from objectionable fish-oil odor. Morruguent retards or prevents infection, reduces systemic absorption of toxic metabolites, hastens granulation and epithelization, and results in a pliable, elastic epithelial surface. Healing takes place with a minimum of surface disfiguration.

Morumide Ointment, 10% sulfanilamide in a suitable base incorporating cod-liver-oil concentrate, has been found particularly useful in the management of burns of the face, hands, and perineum.

MORRUGUENT & MORUMIDE



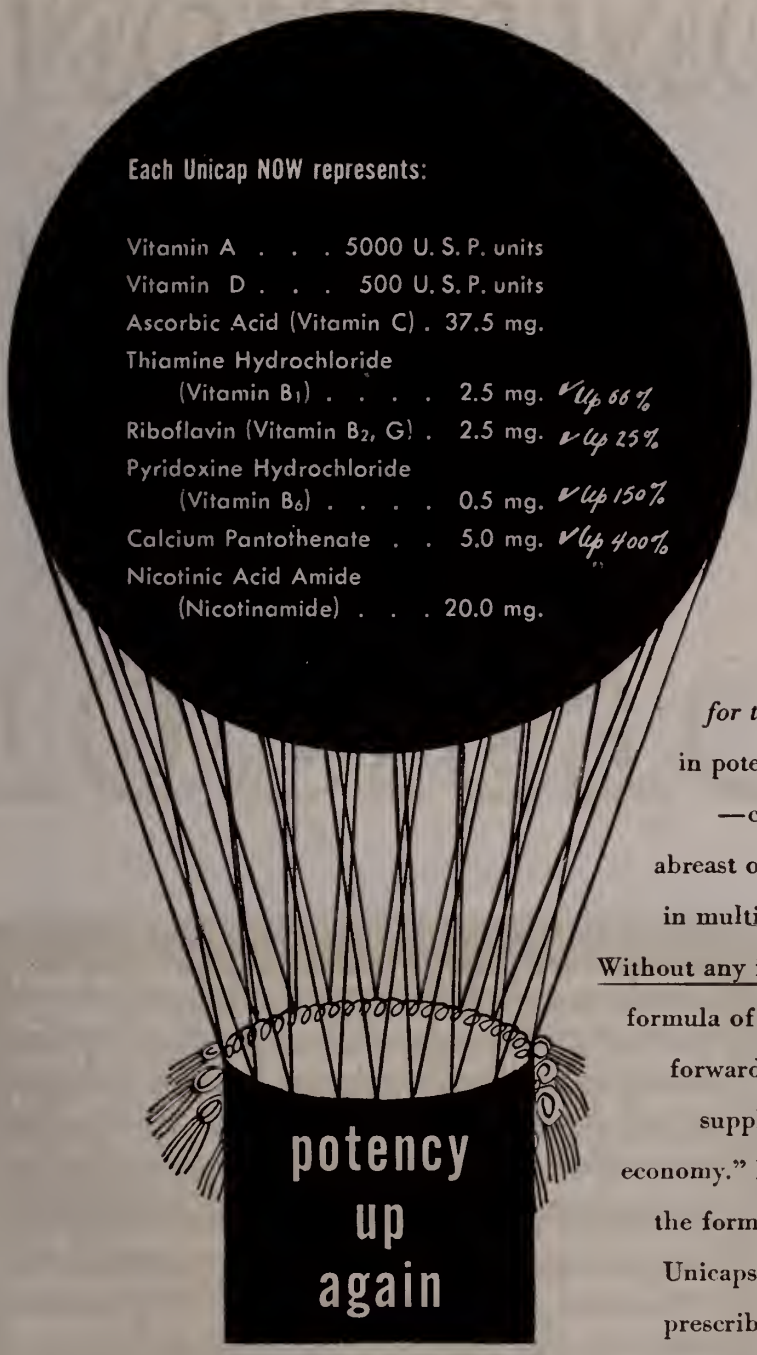
Morruguent and Morumide Ointments are supplied in 2-oz. tubes and in 1-lb. jars

THE S. E. MASSENGILL COMPANY

BRISTOL, TENN.-VA.

NEW YORK • SAN FRANCISCO • KANSAS CITY

SE M CO



STILL KEEPING A PROMISE
". . . that Unicaps will always be a good value — an excellent formula at a low price."

POTENCY UP AGAIN

for the fifth time! An increase in potency—the fifth of its kind—continues to keep Unicaps abreast of the latest developments in multivitamin supplementation. Without any increase in price, the new formula of Unicap* Vitamins carries forward the concept of "effective supplementation at unexcelled economy." Because of the potency of the formula and other advantages, Unicaps remain the preference of prescribers, just as their economy makes them the preference of the users. Unicap Vitamins are available in bottles of 24, 100, 250 capsules.

*Trademark, Reg. U. S. Pat. Off.

UNICAP VITAMINS

Upjohn
KALAMAZOO 99, MICHIGAN

FINE PHARMACEUTICALS SINCE 1886 •

PROMOTION

OF BILE FLOW

THROUGH

DESICOL



Active stimulation of bile secretion, as well as direct substitution of whole bile, is provided with DESICOL Kapseals. DESICOL, containing desiccated fresh whole mammalian bile, represents all factors of original bile. It contains no added laxatives or synthetic bile salts.

Two Kapseals are approximately equivalent to 5 cc. fresh whole gallbladder bile, or 50 to 75 cc. liver bile. The average dose is two or three DESICOL Kapseals three times daily at meal-times.

Parke, Davis & Company

DETROIT 32

MICHIGAN



PENICILLIN in CELLULITIS

Serious local infections such as cellulitis due to hemolytic streptococcic infections—with or without bacteremia—respond rapidly and dramatically to Penicillin.

Initial dosage of 15,000 to 20,000 units is advised. Constant intravenous injection of an isotonic sodium chloride solution follows, allowing administration of 5,000 to 10,000 units every hour, or 120,000 to 240,000 units in a twenty-four hour period. If this method is found inadvisable, 20,000 to 40,000 units may be injected intramuscularly every three or four hours.*

Bristol Penicillin, because of its low toxicity and freedom from pyrogens, its absolute sterility and standard potency, provides dependable therapeutic action.

For additional current literature on the clinical uses of this potent antibiotic, refer to your issues of the BRISTOL PENICILLIN DIGEST.

*Keefer C. S. et al.: New Dosage Forms of Penicillin, J.A.M.A. 128: 1161 (Aug. 18) 1945.

BRISTOL
LABORATORIES
INCORPORATED

Other products of Bristol Laboratories include high-type parenteral medications such as Epinephrine Hydrochloride, Liver Injection, Estrogenic Substance in Oil, and Phenobarbital Sodium.

SYRACUSE 1, NEW YORK

Formerly Cheplin Laboratories Inc.

DERMATOPHYTID



SO BOTHERSOME . . .
SO DIFFICULT TO ERADICATE

To the patient, dermatophytid proves more annoying than the original lesions themselves. Consisting of deep-seated vesicles which exude a thick clear liquid, dermatophytid is the result of hyperallergization from a distantly located fungus infestation. The lesion characteristically gives rise to severe pruritus and, when opened, is especially prone to secondary pyogenic infection. Through the use of Tarbonis, continuously applied, the surrounding inflammatory reaction rapidly subsides and the primary lesions themselves respond promptly. Tarbonis represents a distinct advance in the therapy of dermatophytid over salicylate-benzoic acid unguents and over crude tar preparations, and usually obviates the need for roentgen therapy.

Tarbonis is colorless, odorless, greaseless, does not stain linen or skin. It contains 5% Liquor Carbonis Detergens extracted from selected tar by a unique process, retaining all beneficial factors of tar and eliminating the irritants. Menthol and lanolin are also incorporated in the vanishing cream base, making for a preparation of unusual pharmaceutical elegance. Specifically indicated whenever the action of tar is required.

TARBONIS

REG. U. S. PAT. OFF.

THE TARBONIS COMPANY

4300 Euclid Avenue, Cleveland 3, Ohio



IN OTORHINOLOGIC INFECTIONS

CONSERVATIVE evaluation of the effects of chemotherapeutic agents and of penicillin points to penicillin as the treatment of choice when infection due to penicillin-susceptible organisms must be overcome. Penicillin is preferred because it displays the following advantages over other chemotherapeutic agents: (1) It is more bacteriostatic against streptococci and staphylococci; (2) its action is not perceptibly stayed by the number of bacteria present nor appreciably inhibited by the products of suppuration; (3) it is nontoxic. Applied topically and by aerosolization, it gives promise of still greater advances in the therapy of respiratory tract infections.

Aerosol penicillin (penicillin solution inhaled as a mist) has resulted in complete relief or improvement in more than 200 patients with upper respiratory infections.

Vermilye, H. N., J.A.M.A. 129:250 (Sept. 22) 1945.

Many cases of nasal sinusitis were successfully treated with penicillin administered by displacement. Solutions of penicillin are nontoxic, isotonic, slightly acid—pH 6.5; they neither interfere with ciliary streaming nor do they injure the nasal mucosa.

Tremble, G. E., and Smith, F., Canad. M.A.J. 53:564 (Dec.) 1945.

PENICILLIN-C.S.C.

Manufactured under completely rigid laboratory controls, Penicillin-C.S.C. is safeguarded in potency, sterility, nontoxicity, and freedom from pyrogens. The state of purification reached thereby, makes untoward reactions comparatively rare, even when massive dosage and prolonged administration are required.



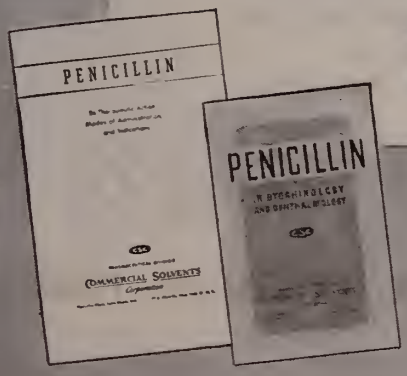
PHARMACEUTICAL DIVISION

CSC COMMERCIAL SOLVENTS CORPORATION

17 East 42nd Street New York 17, N. Y.

ACCEPTED AMERICAN MEDICAL ASSN Council on Pharmacy and Chemistry

Penicillin-C.S.C. is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.



Physicians are invited to send for the two leaflets here shown, one describing penicillin in general, its modes of administration, and especially how to prepare solutions of various concentrations; the other presents the applicability of penicillin in the otorhinologic field.

IDENTICAL IN THERAPEUTIC ACTION WITH DIGITALIS LEAF . . .

Yet ALL THESE ADVANTAGES



THE cardiotonic action of Digitaline Nativelle is identical in all respects with that of digitalis leaf since it represents the chief, active glycoside of Digitalis purpurea—pure, crystalline digitoxin. Vagal slowing of heart rate, myocardial stimulation, and depression of conduction in the A-V node and bundle of His are readily achieved, followed by disappearance of heart failure symptoms.

In addition, however, Digitaline Nativelle presents these outstanding advantages:

CHEMICAL PURITY. The dosage of Digitaline Nativelle is measured in milligrams, thus providing uniformity of composition. One tablet of 0.1 mg. Digitaline Nativelle is therapeutically equivalent to 1 cat unit (1.5 gr.) of digitalis leaf. Hence the dosage, as far as the number of tablets is concerned, is the same.

FREEDOM FROM SIDE ACTIONS. Since it is absorbed in toto, probably from the stomach, Digitaline Nativelle produces virtually no nausea and vomiting due to local action. Adequate dosage may thus be given without fear of gastric upset, an important point in patients with congestive heart failure and their tendency to vomit.

RAPID, ORAL DIGITALIZATION IF DESIRED. In urgent situations, complete digitalization can be accomplished rapidly by oral administration, without side effects. The average dose for this purpose is 1.2 mg., given either at one time or in 2 doses of 0.6 mg. each at a 3 to 6-hr. interval. Digitalization is completed in 6 to 10 hours.

EASE OF DOSAGE CALCULATION. The average maintenance dose of Digitaline Nativelle is 0.1 mg. (1 tablet), the therapeutic equivalent of 1.5 gr. of digitalis leaf. Hence no new instructions to the patient are needed, since the two tablets are therapeutically equivalent. No greater caution is required with Digitaline Nativelle.

Physicians are invited to send for samples, literature and bibliography

VARICK PHARMACAL COMPANY, INC.

A Division of E. Fougera & Co., Inc.

75 Varick Street, New York 13, New York

Digitaline Nativelle

REG. U. S. PAT. OFF.

THE ORIGINAL DIGITOXIN IN PURE, CRYSTALLINE FORM





The foundation is the thing!

Built on a *firm foundation,* the Leaning Tower of Pisa has withstood the centuries . . . so, too, health and vigor in infancy and the years ahead depend on a *firm foundation* of optimum nutrition. • BIOLAC, when supplemented with vitamin C, is a valuable infant food whose ample milk proteins constitute an adequate source of all essential amino acids . . . the indispensable *foundation stones* for sound tissues. • BIOLAC closely approximates mother's milk in safety, simplicity, and nutritional value.

BORDEN'S PRESCRIPTION PRODUCTS DIVISION 350 MADISON AVENUE, NEW YORK 17, N. Y.



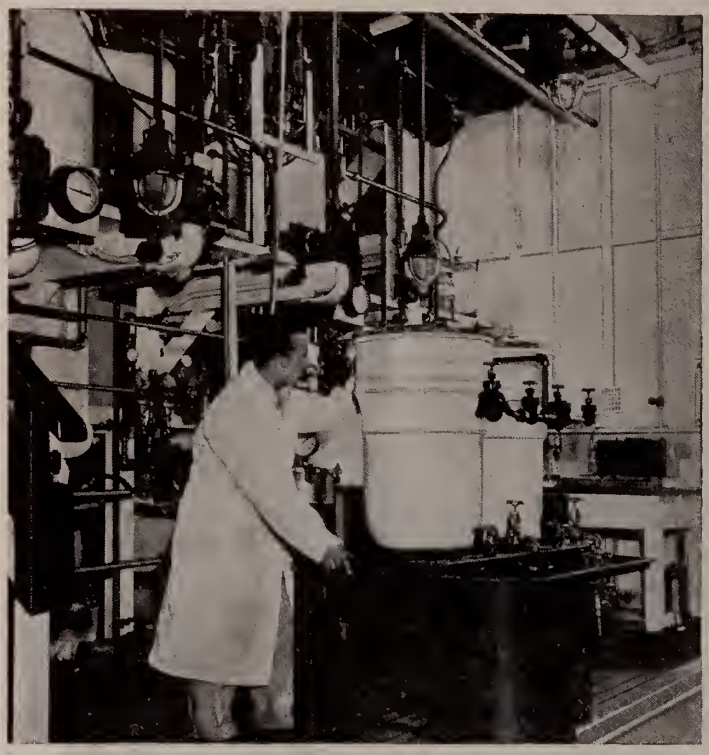
Quickly prepared . . . easily calculated: 1 fl. oz. Biolac to 1½ fl. oz. water per lb. of body weight.

Biolac

"BABY TALK" FOR A GOOD SQUARE MEAL

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods and Nutrition

Biolac is a liquid modified milk, prepared from whole and skim milk with added lactose, and fortified with vitamin B_1, concentrate of vitamins A and D from cod liver oil, and iron citrate. Evaporated, homogenized and sterilized, Biolac is available in 13 fl. oz. cans at all drug stores.



Final stage in the purification of penicillin—the removal of pyrogens by filtration of the penicillin concentrate.



★ ★ ★

Penicillin Merck meets the recognized high standard of quality established for all Merck products. It is subjected to repeated tests and control procedures throughout every step of the production process, and the finished product is assayed, tested, and approved under rigid standards established by the Food and Drug Administration and by the Merck Analytical Laboratories.

A GLIMPSE AT THE RECORD

IN 1940 Merck research on antibiotics concentrated on Penicillin.

IN 1941 Merck brought about a reciprocal arrangement between British and American investigators to spur the production of Penicillin in co-operation with the United States and British governments.

IN 1942 Merck supplied Penicillin for the first case of bacteriemia successfully treated with this drug in the United States.

IN 1943 Merck sent shipments of Penicillin to England by air transport for urgent therapeutic use by the United States Army Medical Corps.

IN 1944 AND 1945 Merck produced ever-increasing supplies of Penicillin for our Armed Forces.

AND NOW, Merck production of Penicillin has reached a point where, in addition to meeting continuing military requirements, large quantities are being produced for civilian medical needs.

★ ★ ★

PENICILLIN
MERCK

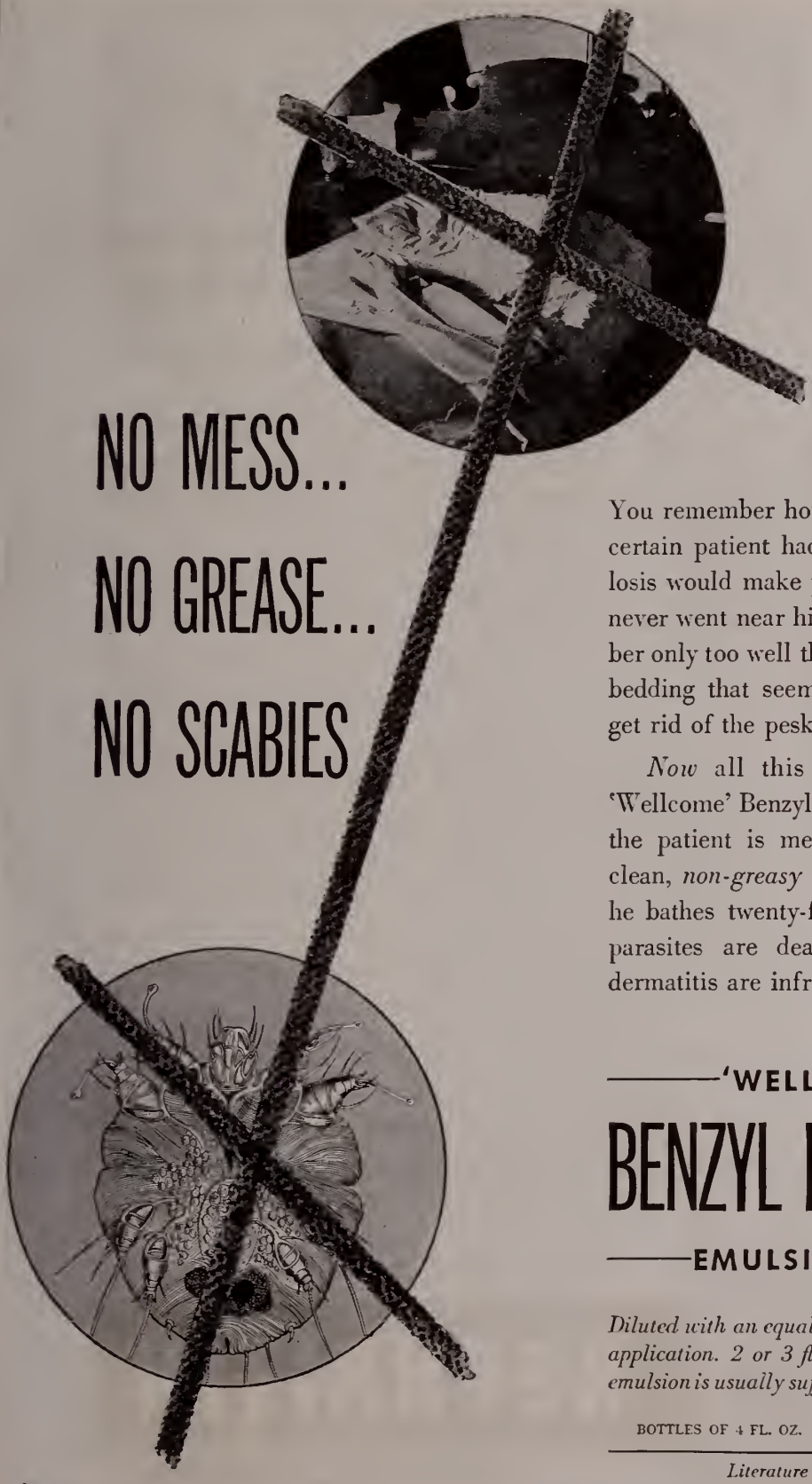
ACCEPTED AMERICAN MEDICAL ASSN Council on Pharmacy and Chemistry

Council Accepted

Literature on request

MERCK & CO., Inc. *Manufacturing Chemists* **RAHWAY, N. J.**

In Canada: MERCK & CO., Ltd., Montreal · Toronto · Valleyfield



NO MESS...
NO GREASE...
NO SCABIES

You remember how just hearing that a certain patient had scabies or pediculosis would make you itch even if you never went near him. And you remember only too well the ointment-smeared bedding that seemed the only way to get rid of the pesky skin parasites.

Now all this is obsolete. With 'Wellcome' Benzyl Benzoate Emulsion, the patient is merely painted with a clean, *non-greasy* emulsion, and when he bathes twenty-four hours later, the parasites are dead. Recurrence and dermatitis are infrequent.

'WELLCOME' BRAND

BENZYL BENZOATE

EMULSION 50%

Diluted with an equal volume of water before application. 2 or 3 fluid ounces of the 25% emulsion is usually sufficient for one treatment.

BOTTLES OF 4 FL. OZ. BOTTLES OF ¼ GALLON

Literature upon request

BURROUGHS WELLCOME & CO. (U.S.A.) INC., 9 & 11 EAST 41st ST., NEW YORK 17



THE *Fate* OF DAMOCLES

IN CHRONIC GLOMERULONEPHRITIS

SUSPENDED by a single hair, a naked sword above the head of Damocles robbed him of the pleasures of the sumptuous banquet of Dionysius . . .

So too, the grave prognosis in chronic glomerulonephritis casts its shadow over the life of the nephritic patient. To postpone the fall of the "sword," is the ultimate object in the management of such cases.

Increased life expectancy in chronic Bright's disease is one of the most fruitful achievements of modern medicine. As a supplement to other therapeutic procedures, Nephritin may be administered routinely. It has been reported to increase urinary flow, favorably increase the output of urea, reduce edema, and aid in relieving subjective symptoms. Large doses of Nephritin are essential.

Nephritin, a strictly prescription medicament, prepared from fresh whole renal substance by special process in the Reed & Carnrick Laboratories, is available in bottles of 80, 500 and 1000. *Literature on request.*



Supported with

NEPHRITIN

REED & CARNRICK
JERSEY CITY 6, NEW JERSEY
TORONTO, ONTARIO, CANADA

A new achievement in Penicillin Therapy . . .

BUCILLIN

TRADE-MARK

PENICILLIN TROCHES

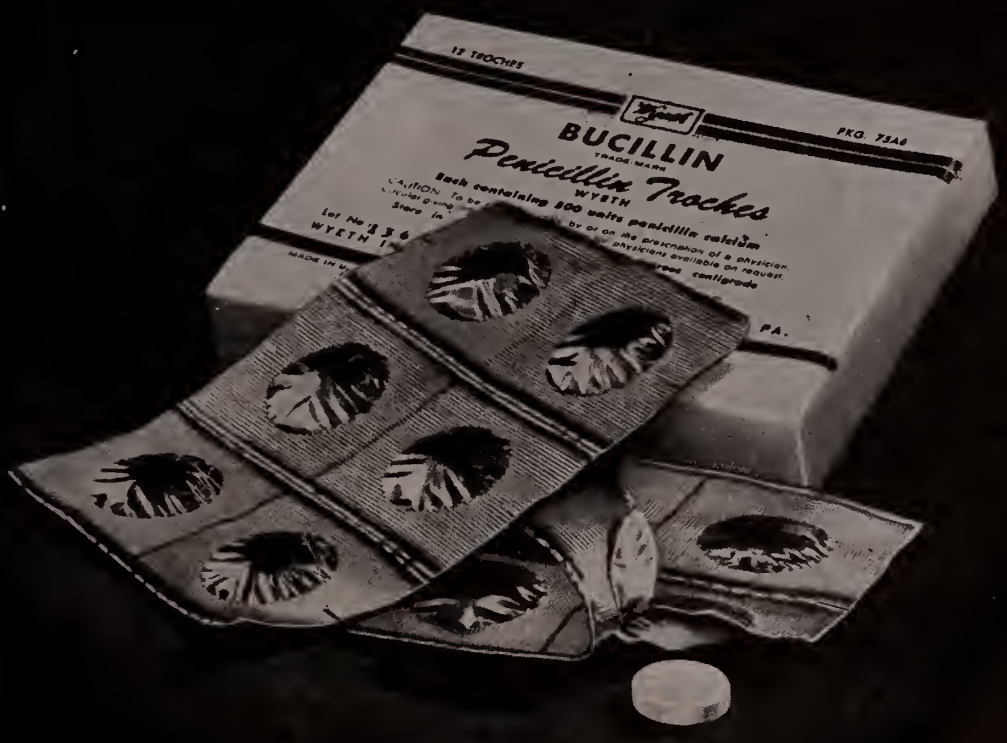
WYETH

BUCILLIN provides a new, effective weapon against Vincent's infection. As the Bucillin troche dissolves in the mouth it releases penicillin to combat the invading organisms by local action. Until further information is available, no claims are made for the use of Bucillin in other infections of the mouth and throat.

Each Bucillin troche supplies 500 units of penicillin. To assure full potency, the troches are individually wrapped in moisture-proof, laminated metallic foil.

Supplied in packages of 12

Wyeth



WYETH INCORPORATED • PHILADELPHIA 3 • PA.

Illinois State Medical Society

OFFICERS OF SECTIONS, 1945-1946

SECTION ON MEDICINE
L. E. Hines, Chmn., 104 S. Michigan Avenue, Chicago
W. H. Newcomb, Secy., Jacksonville

SECTION ON SURGERY
G. E. Johnson, Chmn., 1000 W. 59th Street, Chicago
J. B. Moore, Secy., Benton

SECTION ON EYE, EAR, NOSE & THROAT
Beulah Cushman, Chmn., 25 E. Washington Street, Chicago
H. L. Ford, Secy., Champaign

SECTION ON PUBLIC HEALTH & HYGIENE
E. A. Piszczek, Chmn., 737 S. Wolcott Avenue, Chicago
Richard F. Boyd. Secy., Springfield

SECTION ON RADIOLOGY
P. R. Dirkse, Chmn., St. Francis Hospital, Peoria
Frank L. Hussey, Secy., 250 E. Superior Street, Chicago

SECTION ON PEDIATRICS
John F. Carey, Chmn., Joliet
G. N. Krost, Secy., 2376 E. 71st Street, Chicago

SECTION ON OBSTETRICS & GYNECOLOGY
J. P. Greenhill, Chmn., 55 E. Washington Street, Chicago
E. N. Nash, Secy., Galesburg

SECTION ON PATHOLOGY
H. R. Fishback, Chmn., 303 E. Chicago Avenue, Chicago
M. C. Corrigan, Secy., 2839 Ellis Avenue, Chicago

COUNTY SOCIETIES

This list is corrected in accordance with the best information obtainable at the date of going to press. County Secretaries are requested to notify The Journal of any changes or errors.

County	President	Secretary
Adams	Ralph Hinton, Quincy	Walter Stevenson, Quincy.
Alexander	Howard Stuckey, Cairo	J. S. Johnson, Cairo.
Bond	D. T. Brown, Mulberry Grove	Katherine B. Luzader, Greenville.
Boone	M. L. Hartman, Belvidere	S. J. Smith, Belvidere.
Bureau	J. Harold Hopkins, Walnut	Gerald S. McShane, Spring Valley.
Calhoun	(See Pike-Calhoun)	R. E. Davies, Spring Valley.
Carroll	C. E. Turner, Savanna	W. J. Scholes, Lanark, Ill.
Cass	T. G. Charles, Beardstown	B. A. Desulis, Beardstown.
Champaign	C. S. Bucher, Champaign	J. D. McKinney, Champaign.
Christian	H. M. Wolfe, Taylorville	W. S. Miller, Assumption.
Clark	C. O. Highsmith, Westfield	H. C. Houser, Westfield.
Clay	J. P. Shore, Sailor Springs	D. Curtis Henderson, Clay City.
Clinton	I. A. Bauer, Germantown	J. Q. Roane, Carlyle.
Coles-Cumberland	W. F. Stafford, Mattoon	B. Raymond Cole, Mattoon.
Cook	J. J. Moore, Chicago	W. W. Furey, Chicago.
Crawford	B. C. Teasley, Jr., Robinson	L. P. Sloan, Oblong
De Kalb	Ralph G. McAllister, DeKalb	Paul W. Carney, DeKalb
De Witt	Chas. S. Bogardus, Clinton	Wm. R. Marshall, Clinton.
Douglas	E. J. Gross, Arcola	J. O. Cletcher, Tuscola.
Du Page	L. C. Clowes, Hinsdale	A. R. Rikli, Naperville.
Edgar	H. D. Junkin, Paris	Paul E. Fleener, Paris.
Edwards	E. E. Robert, West Salem	R. L. Moter, Albion.
Effingham	Frank Buckmaster, Effingham	Harry W. Schumacher, Altamont.
Fayette	A. M. Fromm, Ramsey	E. A. Kuehn, Vandalia.
Ford	A. L. Potts, Gibson City	Edward A. Tappan, Paxton.
Franklin	O. L. Rutherford, Christopher	R. E. Steck, Christopher
Fulton	W. H. Betts, Havana	P. D. Reinertson, Canton
Gallatin	E. W. Burroughs, Shawneetown	James A. Kirby, New Haven.
Greene	A. D. Wilson, Carrollton	W. H. Garrison, White Hall.
Hancock	I. W. Salowitz, Plymouth	Blair Kelly, Ferris.
Hardin	S. E. Oxford, Cave-in-Rock	
Henderson	M. J. Babcock, Biggsville	Elmer T. Swann, Oquawka.
Henry	Worling R. Young, Geneseo	P. J. McDermott, Kewanee.
Iroquois	A. W. Fordyce, Gilman	Ryland Buckner, Gilman
Jackson	Wm. F. Felts, Carbondale	Edward K. Ellis, Murphysboro.
Jasper	Wm. E. Franke, Newton	C. O. Absher, Newton.
Jefferson Hamilton	C. O. Hamilton, Mt. Vernon	T. B. Williamson, Mt. Vernon
Jersey	Hugh R. Bohannan, Jerseyville	Bert M. Brewster, Jerseyville.
Jo Daviess	G. C. McGinnis, Warren	R. E. Logan, Galena.
Johnson	Wm. Thompson, Cypress	E. A. Veach, Vienna.
Kane	S. L. Gabby, Elgin	K. M. Manougian, Elgin.
Kankakee	G. W. Morrow, Kankakee	A. L. Nickerson, Kankakee.
Kendall	No Society	
Knox	Wm. Johnson, Galesburg	G. K. Smart, Galesburg.
Lake	H. Floyd Cannon, Waukegan	R. M. Watrous, Highland Park.
La Salle	R. I. Barrickman, Streator	F. J. Maciejewski, La Salle.
Lawrence	R. B. Armitage, Lawrenceville	L. W. Frame, Lawrenceville.
Lee	S. P. Stackhouse, Dixon	J. M. Lund, Dixon.
Livingston	O. L. Bettag, Pontiac	E. G. Beatty, Pontiac.
Logan	Chester Davis, Lincoln	R. Lynn Ijams, Atlanta.
McDonough	W. E. Carnahan, Macomb	W. M. Hartman, Macomb.

*Deceased.

(Continued on page 60)

"Some Griefs Are Medicinable"
. . . Cymbeline act III, scene II

Many patients stricken with grief over misfortune or bereavement develop abnormal reactive depressions . . . differentiated from normal depressions of mood by their inordinate intensity and stubborn persistence.

With these patients, Benzedrine Sulfate therapy is often dramatically effective. In many cases,

benzedrine sulfate *(racemic amphetamine sulfate, S.K.F.)*

tablets and elixir

will break the vicious circle of depression, renew the patient's interest and optimism, and restore his capacity for physical and mental effort.



Smith, Kline & French Laboratories, *Philadelphia, Pa.*

(County Officers Continued)

McHenry	A. V. Lindberg, Crystal Lake	E. E. Kunde, Marengo
McLean	G. E. Hartenbower, Bloomington	H. R. Watkins, Bloomington.
Macon	R. A. Tearnan, Decatur	C. R. Fisher, Decatur.
Macoupin	A. C. Goff, Staunton	D. J. Zerbolio, Benld.
Madison	J. W. Kempff, Highland	E. F. Moore, Collinsville.
Marion	H. L. Logan, Salem	H. O. Williams, Centralia.
Mason	C. H. Stubenrauch, Havana	W. A. Steele, Havana.
Massac	V. M. Timm, Metropolis	G. F. Cummins, Metropolis.
Menard	T. V. Plews, Petersburg	H. P. Moulton, Petersburg.
Mercer	Nellie E. March, Aledo	V. A. McClanahan, Aledo.
Monroe	E. T. Lark, Columbia	**J. A. Werth, Waterloo.
Montgomery	George A. Telfer, Hillsboro	C. H. Sihler, Litchfield
Morgan	V. T. J. Lenth, Jacksonville	G. L. Drennan, Jacksonville
Moultrie	R. C. Coffey, Bethany	W. B. Kilton, Sullivan.
Ogle	L. R. McDaniel, Polo	A. R. Bogue, Rochelle.
Peoria	Fred Decker, Peoria	W. E. Owen, Peoria.
Perry	G. H. Gutridge, Du Quoin	H. I. Stevens, Tamaroa.
Piatt	A. M. Bruner, Bement	W. N. Sievers, White Heath.
Pike	James Goodman, Pleasant Hill	Myer Shulman, Pittsfield.
Pope		L. S. Barger, Golconda.
Pulaski	Oscar Caraker, Olmstead	Otis T. Hudson, Mounds.
Randolph	J. W. Beare, Chester	W. W. Fullerton, Steeleville.
Richland	Alexis T. Telford, Olney	H. N. Fisher, Olney.
Rock Island	L. A. Dondanville, Moline	N. C. Barwasser, Moline.
St. Clair	Olin B. Boyd, E. St. Louis	F. E. Bihss, E. St. Louis.
Saline	*G. C. Ferrell, Eldorado	Neva Skelton, Eldorado.
Sangamon	C. S. Mayes, Springfield	Wm. DeHollander, Springfield
Schuyler	A. W. Ball, Rushville	H. O. Munson, Rushville.
Scott	No Society	
Shelby	A. B. Storm, Windsor	C. H. Hulick, Shelbyville.
Stephenson	C. M. Becker, Freeport	D. J. Doelker, Freeport
Tazewell	Roland C. Wherry, Pekin	Russel K. Taubert, Pekin.
Union	B. V. Rife, Anna	E. V. Hale, Anna.
Vermilion	H. E. Ross, Danville	Holland Williamson, Danville
Wabash	E. P. Keneipp, Mt. Carmel	H. A. Elkins, Mt. Carmel.
Warren	Ralph Graham, Monmouth	Chas. P. Blair, Monmouth.
Washington	P. B. Rabenneck, Nashville	G. A. Green, Nashville.
Wayne	Gilbert T. Ranson, Fairfield	Kenneth O. Hubble, Fairfield
White	C. J. Rosenberg, Norris City	L. R. Medoff, Grayville.
Whiteside	R. H. Lester, Morrison	G. J. Pohly, Sterling.
Will-Grundy	L. J. Wilhelmi, Joliet	Joseph Trizna, Joliet.
Williamson	J. F. McKee, Johnston City	W. W. Ritchey, Marion.
Winnebago	Anfin Egdahl, Rockford	John O. Heald, Rockford.
Woodford	R. E. Gordon, El Paso	W. S. Morrison, Minonk.

*Deceased

Nutrition in Disease

Disease entities can be treated with greater efficiency when the complicating factor of nutritional failure is corrected.

B-NUTRON SYRUP *Bottles 4-8-16 oz.*

B-NUTRON CAPULES *Bottles 40-100 Capules*

B Complex and Iron Dual Dosage Forms

Each teaspoonful of B-Nutron Syrup (5 cc.) provides:

Thiamine Chloride (B_1)	2 mg.	Niacinamide	10 mg.
Riboflavin (B_2)	0.5 mg.	Ferrous Gluconate	1 gr.
Pyridoxine (B_6)	0.2 mg.	Manganese Sod. Cit. N.F. VII	¼ gr.

B-Nutron Capules provide essentially the same formula for use when this form is more acceptable to the patient than a syrup.

Indications

Chronic Diseases ★ Pre and Post Operative Care ★ Pregnancy and Lactation ★ Infancy and Childhood ★ Convalescence and Restricted Diet

NION CORPORATION NION **LOS ANGELES 38, CALIF.**



THE KEY TO A THERAPEUTIC PUZZLE

White's
MULTI-BETA CAPSULES

In certain menstrual irregularities, B complex enhances the return to normal function. The recognition that the liver loses its ability to inactivate estrogen in the presence of vitamin B complex deficiency[1, 2] logically indicates a thorough search for nutritional deficiency in menstrual disorders. Often, the therapeutic key to the successful treatment of menorrhagia, metrorrhagia, premenstrual tension, painful breasts, cramps, lumbar pain, etc., may prove to be supplementation with B complex.

White's Multi-Beta Capsules provide an ideal means of adequately supplementing such dietary deficiencies. They constitute a potent form of the entire B complex, providing all the clinically significant B factors in amounts adequate for effective treatment of deficiency-caused endocrine dysfunction. Three to six capsules daily will usually constitute adequate dosage.

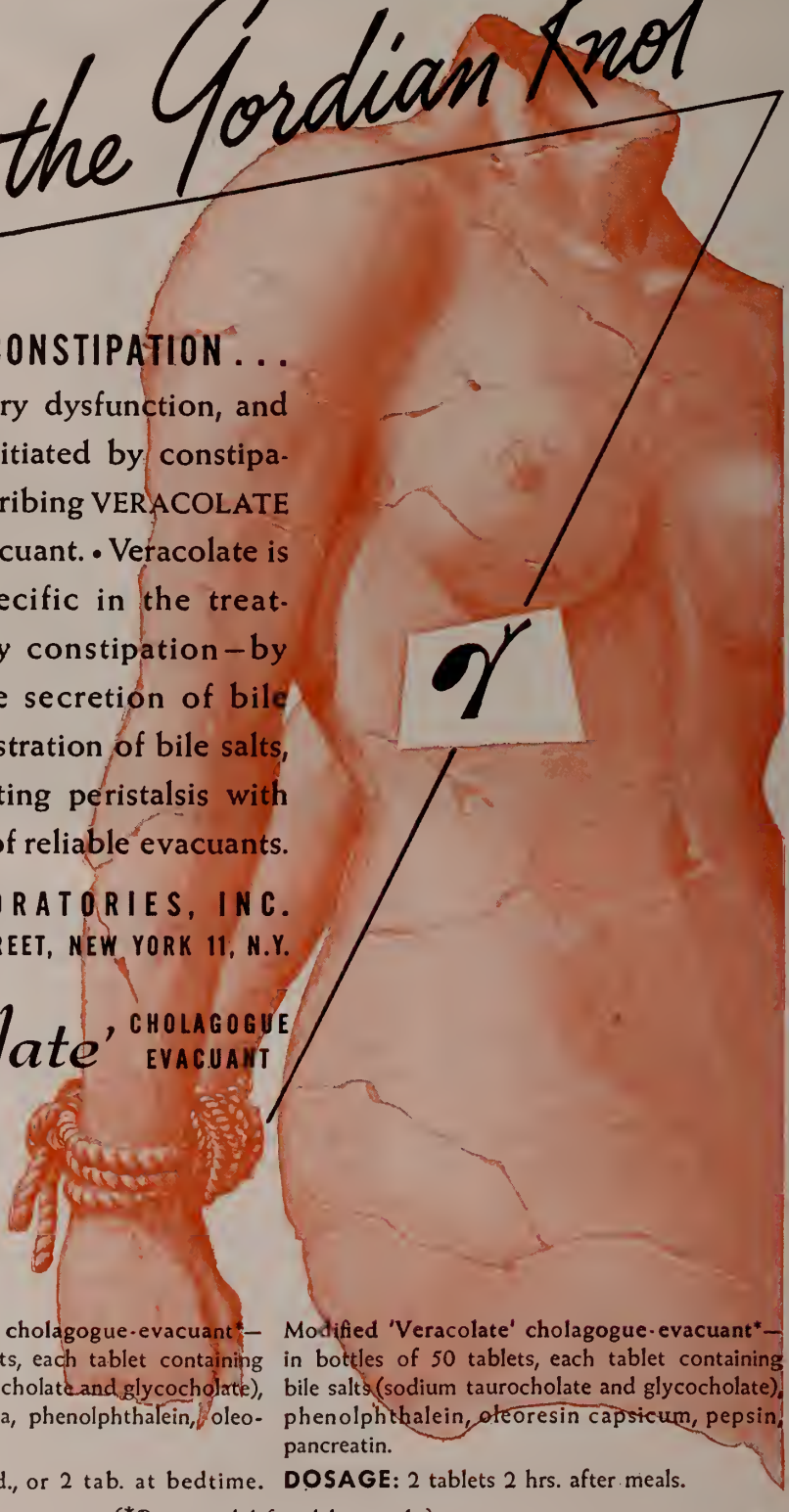
Supplied in bottles of 30, 100 and 500.

Ethically promoted—not advertised to the laity.

White Laboratories, Inc., Pharmaceutical Manufacturers, Newark 7, N. J.

1. Israel, S. L., et al., Am. J. Med. Sc. 194:835, 1937.
2. Golden, J. B., and Sevringhaus, E. L.: Proc. Soc. Exp. Biol. and Med. 39:361, 1938.

Cut the Gordian Knot



OF BILIARY CONSTIPATION . . .

caused by biliary dysfunction, and biliary stasis initiated by constipation . . . by prescribing VERACOLATE cholagogue-evacuant. • Veracolate is simple and specific in the treatment of biliary constipation—by stimulating the secretion of bile through administration of bile salts, and by promoting peristalsis with small amounts of reliable evacuants.

MARCY LABORATORIES, INC.
113 WEST 18th STREET, NEW YORK 11, N.Y.

'Veracolate' CHOLAGOGUE EVACUANT

SUPPLY: 'Veracolate' cholagogue-evacuant*—in bottles of 50 tablets, each tablet containing bile salts (sodium taurocholate and glycocholate), extract cascara sagrada, phenolphthalein, oleoresin capsicum.

DOSAGE: 1 tab. t.i.d., or 2 tab. at bedtime.

Modified 'Veracolate' cholagogue-evacuant*—in bottles of 50 tablets, each tablet containing bile salts (sodium taurocholate and glycocholate), phenolphthalein, oleoresin capsicum, pepsin, pancreatin.

DOSAGE: 2 tablets 2 hrs. after meals.

*(*Recommended for adult use only)*



A firm position in the therapy of rheumatoid arthritis

Gold has proved its worth during the fifteen years it has been used for rheumatoid arthritis and today, holds a firm position among chemotherapeutic drugs. Clinical reports indicate that improvement may be expected in eighty per cent or more of patients receiving adequate amounts of gold.

SOLGANAL-B OLEOSUM

SOLGANAL-B OLEOSUM is a special preparation of organic gold, aurothioglucose. It is water soluble, but suspended in oil to prolong its absorption and enhance its safety. Being an *organic* gold compound, SOLGANAL-B OLEOSUM is less toxic than the *inorganic* gold salts and yet equally efficient.

SOLGANAL-B OLEOSUM (aurothioglucose, $C_6H_{11}O_5SAu$), containing approximately 50 per cent gold, is administered by intramuscular injection in repeated courses with intervening rest periods. It is available in several strengths to permit flexibility of dosage.

The Medical Research Division welcomes inquiries and will supply literature on SOLGANAL-B OLEOSUM dealing with its manner of use, dosage, precaution and toxicity.

Trade-Mark SOLGANAL-B OLEOSUM — Reg. U.S. Pat. Off.

SCHERING

Schering CORPORATION • BLOOMFIELD, N. J.
In Canada, Schering Corporation Limited, Montreal

MOTHER'S DAILY GUIDE BOOK!



Free

To Give Your Patients
To Conserve Your Time

Written by Phyllis Krafft Newill
Supervised by a Leading Pediatrician

COUPON BRINGS SAMPLE COPY!

This authoritative, comprehensive booklet on child feeding, care and training is now available to you in quantities for free distribution to your patients. It is written by the co-author of "All About Feeding Children," selected by Parents' Magazine as one of the best books of 1944. The physicians who read and approved "Bringing Up Baby" before publication believe that such a step-by-step guide for mothers will save any busy doctor many phone calls.

The only advertising matter in the booklet is some paragraphs on Quaker Enriched Farina —its value as a "first cereal"—its enrichment with Vitamin "D," 2 B-Vitamins, Calcium and Iron.

This time-tested cereal is milled to Quaker's high standards, the same standards that have made Quaker and Mother's Oats trusted names for four generations.

Mail coupon for sample copy, for immediate shipment of any reasonable quantity, or periodic shipments as best suits your convenience.

Quaker
ENRICHED
FARINA

Mail This Request Coupon NOW!

QUAKER OATS COMPANY
BOX 712, CHICAGO, ILLINOIS

Please send your new booklet "Bringing Up Baby" in the following quantities: One sample copy ☐. Immediate shipment of.....copies. Shipment of.....copies every.....weeks.

Name.....

Address.....

City.....*Zone*.....*State*.....



malignancy incognito?

There is *no* danger with 'Anusol'* Hemorrhoidal Suppositories that the symptoms of serious rectal pathology will be masked—for 'Anusol' Hemorrhoidal Suppositories contain no narcotics, no anesthetics. The nerves of the rectal region are not anesthetized, thus permitting continued function of sensory warning mechanisms. 'Anusol' Hemorrhoidal Suppositories achieve relief of symptoms *safely,* by means of decongestion, lubrication and protection.

Schering & Glatz, Inc., a subsidiary of

William R. WARNER and Co. Inc. 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'anusol'

*Trademark Reg. U. S. Pat. Off.

Available in boxes of 6 and 12 suppositories

Hemorrhoidal Suppositories



Specialization

Since the inception of our business we have devoted specialized skills to the manufacture of Vitamin Products on which physicians can rely. Today the name WALKER on a vitamin product is accepted as synonymous with dependability.

Among Walker products bearing A.M.A. Council acceptance are: Ascorbic Acid, Niacin, Sol. Thiamine HCl, Hexavitamin (U.S.P.), Riboflavin, Thiamine HCl Tablets, and Concentrated Oleo Vitamin A-D Drops. WALKER Vitamin Products are available through all prescription pharmacies.

You assure quality when you specify "WALKER."



Walker VITAMIN PRODUCTS, INC.
Mount Vernon New York

Friendly pause





You wouldn't think so if you itched from diaper rash, eczema, chafing, chickenpox or scarlet fever. It would seem mighty important to you . . . and so would the soothing comforting relief of ENZO-CAL.

Rubbed gently on irritated areas, the benzocaine in ENZO-CAL promptly allays the burning, stinging pain and, at the same time, a protective, healing layer of semi-colloidal calamine and zinc oxide is left on the skin.

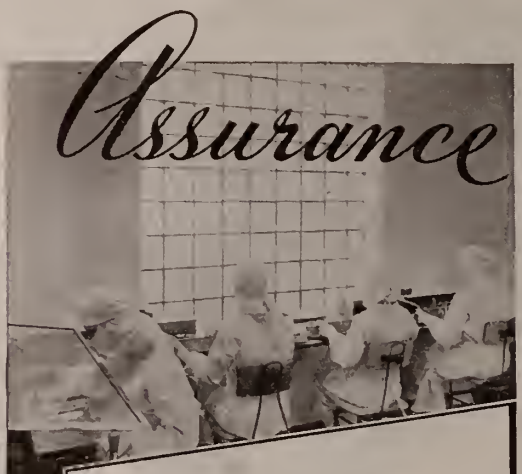
Mothers, too, appreciate ENZO-CAL because it is clean, convenient to use, and *greaseless.*

Prescribe ENZO-CAL in your next case of pruritus . . . or, better yet, suggest that your patients keep a tube on hand for routine use in the various skin irritations of infanthood.

May we send you a FREE trial tube of ENZO-CAL? Address your request to us at 305 East 45 St., New York 17, N. Y.

CROOKES *Laboratories*

Enzo-CAL for ITCHING



Sterile ampule production by the H. W. & D. system assures the physician and druggist of the most modern and carefully controlled methods.

The plan of operation and much of the equipment were designed by the H. W. & D. staff to provide aseptic technique through all stages from the preparation of solutions to the final sealing of ampules.

Chemical and biological controls and inspections throughout the process insure product uniformity and sterility.

The physician has assurance in using such H. W. & D. ampule products as Lutein, Phenolsulfonphthalein, Bromsulphalein, Indigo Carmine and Bromsalizol.

Complete list on request.



HYNSON, WESTCOTT & DUNNING, INC.

Baltimore 1, Maryland

ACCIDENT - HOSPITAL - SICKNESS

INSURANCE

FOR PHYSICIANS, SURGEONS, DENTISTS EXCLUSIVELY

ALL PREMIUMS COME FROM — PHYSICIANS SURGEONS DENTISTS — ALL CLAIMS GO TO

$5,000.00 accidental death $25 weekly indemnity, accident and sickness	**$8.00** Quarterly
$10,000.00 accidental death $50 weekly indemnity, accident and sickness	**$16.00** Quarterly
$15,000.00 accidental death $75 weekly indemnity, accident and sickness	**$24.00** Quarterly

ALSO HOSPITAL EXPENSE FOR MEMBERS, WIVES AND CHILDREN

86c out of each $1.00 gross income used for members' benefit

$2,800,000.00 INVESTED ASSETS — **$13,000,000.00 PAID FOR CLAIMS**

$200,000.00 deposited with State of Nebraska for protection of our members.

Disability need not be incurred in line of duty—benefits from the beginning day of disability

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION

43 years under the same management
400 First National Bank Building — OMAHA 2, NEBRASKA

Radium Rental Service

By

THE PHYSICIANS RADIUM ASSOCIATION

Organized for the purpose of making radium available to physicians to be used in the treatment of their patients. Radium loaned to physicians at moderate rental fees, or patients may be referred to us for treatment if preferred.

•

The Physicians Radium Association

Room 1307—55 East Washington St., Pittsfield Bldg., CHICAGO 2, ILL.

Telephones: Central 2268-2269

Wm. L. Brown, M.D., Director



STILL A STANDARD

In appraising the potency and therapeutic value of antirachitic agents, the norm and standard still remains time-honored, time-proved cod liver oil.

Your patients obtain the wholly-natural vitamins A and D of cod liver oil itself when you prescribe any one of the three palatable, convenient dosage forms of

WHITE'S COD LIVER OIL CONCENTRATE

The economy factor of White's Cod Liver Oil Concentrate is important to many patients—*prophylactic antirachitic dosage for infants still costs less than a penny a day.*

3 Forms for your Prescription Convenience:

LIQUID—for drop dosage to infants

TABLETS—for youngsters and adults

CAPSULES—for larger dosage

Ethically promoted—not advertised to the laity. White Laboratories, Inc., Pharmaceutical Manufacturers, Newark 7, N. J.

ACCEPTED
AMERICAN MEDICAL ASSN
Council on Pharmacy and Chemistry

Your Advertisers

This is an index of those who serve the Medical Profession and support your journal. All advertisers are approved by your Journal Committee. It will help you to mention your Journal when writing them.

BODY SUPPORTS

J. E. Hanger, Inc., Chicago 5 71
Spencer, Inc., New Haven 7, Conn. 71

CLASSIFIED

Classified Advertisements 76

FOODS

Borden Company, 350 Madison Ave., New York 53
Coca Cola, Atlanta, Ga. 66
Knox Gelatin Laboratories, Johnston, N. Y. .....
Mead Johnson & Co., Evansville, Ind. .. Inside Back Cover
National Dairy Products Co., New York 17 8
Nestlé's Milk Products, Inc., 155 E. 44th St., New York 17 72
Quaker Oats Co., Chicago, Ill. 64
Wander Company, 360 N. Michigan Ave., Chicago .....

FINANCIAL AND INSURANCE

Medical Protective Co., Fort Wayne, Ind. 3
National Discount & Audit Co., New York 75
Physicians Casualty Co., Omaha, Neb. 68

PHARMACEUTICALS

Ames Co., Inc., Elkhart, Ind. 75
Ar-Ex Cosmetics, Inc., 6 N. Michigan Ave., Chicago 2, Ill. 76
Ayerst, McKenna & Harrison Ltd., New York 16 11
Bristol Laboratories, Inc., Syracuse 1, N. Y. 49
Bristol-Meyers Co., New York .....
Burroughs Wellcome & Co., New York 16, 55
Ciba Company, Summit, N. J. 23, 24, 25, 26
Commercial Solvents Corp., Terre Haute, Ind. 51
Crookes Laboratories, Inc., 305 E. 45th St., N. Y. 67
Doho Chemical Co., New York 4
Otis E. Glidden & Co., Evanston .....
Gold Pharmacal Co., New York 73
Harrower Laboratories 36
Hoffman-LaRoche, Inc., Nutley, N. J. 22
Holland-Rantos Co., Inc., 551 Fifth Ave., New York ..
Hoosier Pharmacal Co., Indianapolis, Ind. 72
Hynson Westcott & Dunning, Charles and Chase Sts., Baltimore 68
International Vitamin Corp., 50 E. 42nd St., New York City .....
Irwin, Neisler & Co., Decatur, Ill. 33
Lanteen Medical Laboratories, Chicago 10 44
Thos. Leeming Co., 155 E. 44th St., New York 17 ....
Lilly, Eli & Co., Indianapolis, Ind. 40, 41, 42
Maltbie Chemical Co., Newark, N. J. 13
Marcy Laboratories, Inc., New York 11 62
S. E. Massengill Co., Bristol, Tenn. 46
McNeil Laboratories, Inc., Philadelphia, Pa. 28
Merck & Co., Rahway, N. J. 54
Morris, Philip & Co., 119 Fifth Ave., New York 45
National Oil Products, Harrison, N. J. 37
Nion Corporation, Los Angeles 38, Calif 60
Num Specialty Co., Pittsburgh, Pa. 71
Parke, Davis & Co., Detroit, Mich. 48
Pitman-Moore Co., Indianapolis 6, Indiana 17
Rare Chemicals, Inc., Flemington, N. J. .....
Reed & Carnrick, Jersey City 6, N. J. 56
Rees Davis Drugs, Meriden, Conn. 27
Reynolds & Co., R. J. Winston-Salem, N. C. 29
Riedel-de Haen, Inc., New York City .....
Roche-Organon, Inc., Nutley, N. J. 35
J. B. Roerig & Co., 536 Lake Shore Drive, Chicago 12
Schenley Laboratories, Inc., N. Y. 1, N. Y. 34
Schering Corp., Bloomfield, N. J. 7, 63
Schmid, Julius, Inc., 423 W. 55th St., New York City .. 32
G. D. Searle & Co., P. O. Box 5110, Chicago ..... Inside Front Cover
Sharpe & Dohme, 11 N. Canal St., Chicago .....
Smith, Kline & French, Philadelphia .. 14, 20, 21, 43, 59
E. R. Squibb & Sons, New York 31
Frederick Stearns & Co., Detroit, Mich. 10
The Tarbonis Co., Cleveland 3, Ohio 50
Upjohn Co., Kalamazoo, Mich. 47
Varick Pharmacal Co., 75 Varick St., N. Y. 13, N. Y. . 52
Walker Vitamin Products, Inc., New York 66
Wm. R. Warner & Co., 113 W. 18th St., New York 9, 15, 65
Warren-Teed Products Co., Columbus 8, Ohio 38
Whittaker Laboratories, Inc., New York City 39
White Laboratories, Inc. 5, 6, 18, 61, 69
Winthrop Chemical Co., 70 Varick St., New York 30
Wyeth Incorporated 19, 57
Zemmer Co., Pittsburgh, Pa. 76

SANATORIA AND SANITARIA

Costeff Sanatorium, Peoria, Ill. 74
Edward Sanatorium, Naperville, Ill. 74
Kenilworth Sanitarium, Wilmette, Ill. 73
Mitchell Farm, Peoria 73
Milwaukee Sanitarium, Wauwatosa, Wis. .... Back Cover
Norbury Sanatorium, Jacksonville, Ill. 73
North Shore Health Resort, Winnetka 74
Mary E. Pogue School, Wheaton, Ill. 75
Stokes Sanitarium, Louisville, Ky. 76
Weirick's Sanitarium, Elgin, Ill. 76

SURGICAL SUPPLIES

General Electric X-Ray Corp., 2012 W. Jackson Blvd., Chicago .....

RADIUM

Central X-Ray & Clinical Lab., 58 E. Washington St., Chicago 74
Physicians Radium Assn., 55 E. Washington St., Chicago 68

BOOK REVIEWS

MEN WITHOUT GUNS: By DeWitt Mackenzie with an introduction by Major General Norman T. Kirk, Surgeon General of the United States Army. The Blakiston Company, Philadelphia, Pa. 1945. Price $5.00.

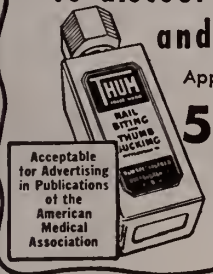
The Abbott collection of paintings, owned by the United States Government, and fed out to members of the medical profession through "What's New", has been assembled and presented by The Blakiston Company as a fitting tribute to "men without guns". The vivid, dynamic work of the twelve contributing painters drives home to the reader the courage and simple heroism of the corpsmen, the nurses, the ambulance drivers, the stretcher bearers, and the physicians and surgeons that make up the modern war-team of medicine.

Least the power of the pictured warfare overwhelms the reader, his attention should be specifically called to the excellent commentary presented by DeWitt Mackenzie, war analyst of The Associated Press. His cryptic phrases, keen insight into world affairs supplements and aug-

(*Continued on page 74*)

RECOMMEND THUM TRADE MARK

to discourage thumb-sucking and nail biting



Apply like nail polish

50¢ at all drug-stores **$1.00**

THUM TRADE MARK contains extract of capsicum (2.34%) in a base of acetone nail lacquer and isopropyl alcohol.

Acceptable for Advertising in Publications of the American Medical Association

J. E. HANGER, inc.

1112 S. Michigan Ave. Chicago 5, Ill.
Phone Wab. 1135
1912 Olive St. St. Louis 3, Mo.
Phone CEntral 1088-1089

DURALUMIN AND ENGLISH WILLOW LIMBS
MECHANICAL ARMS
TRUSSES CANES CRUTCHES
INVALID CHAIRS

Illustrated Catalog Sent on Request

Postural Symptoms During Pregnancy Often Averted Or Relieved By A SPENCER SUPPORT



At left:
A Spencer antepartum support designed especially for this woman. Equally effective for postpartum period.

Abdominal support provides a rest for the weight of the abdomen and is accurately correlated with support to back, thus effecting marked posture improvement.

Light, flexible, easily adjusted to increasing development.

Note, also, the Spencer antepartum-postpartum breast support designed especially for her.

Spencer Supports meet your patients' needs exactly *because*: Each Spencer Support is individually designed, cut, and made at our New Haven Plant *after* a description of the patient's body and posture has been recorded and 15 or more measurements have been taken.

For a dealer in Spencer Supports look in telephone book under Spencer corsetiere, or write direct to us.

SPENCER, INCORPORATED
129 Derby Ave., New Hoven 7, Conn.
In Canada: Rock Island, Quebec.
In England: Spencer (Banbury) Ltd., Banbury, Oxon.

May We Send You Booklet?

Please send me booklet, "How Spencer Supports Aid the Doctor's Treatment."

Name ..... M.D.

Street .....

City & State G-2-46

SPENCER *INDIVIDUALLY DESIGNED* SUPPORTS
Reg. U.S. Pat. Off.
For Abdomen, Back and Breasts



INJECTABLES FOR THE PROFESSION

AMPULS

Solution of Estrogens	1 cc.	10,000 I. U.
Aminophylline	2 cc.	7½ grains
Anterior Pituitary	1 cc.	18½ grains
Ovarian Extract	1 cc	40 grains
Progesterone	1 cc.	2 milligrams
Stilbestrol	1 cc.	1 milligram

15 cc. AND 30 cc. VIALS

Adrenal Cortex	Gamicine	Proteman
Anterior Pituitary	Liver Injection	Protesine
Beliverex	Male Sex Hormone	Pyridoxine Hydrochloride
Bismuth Subsalicylate	Ovarian Extract	Stilbestrol
Chondratine	Pantothenic Acid	Thiamine Hydrochloride
Chorionic Gonadotropin	Pluriglandular	Vibatine
Corpus Luteum	Progesterone	Vibeplex

Solution of Estrogens 25,000 I. U., 10,000 I. U.
D-Trol, 500,000 U. S. P. Units Vitamin D

WE ALSO MANUFACTURE A LINE OF LIQUID PHARMACEUTICALS, TABLETS, AND OINTMENTS

HOOSIER PHARMACAL COMPANY

INDIANAPOLIS, INDIANA

ORIGINATORS OF CAPSOIDS

Service to the Medical Profession For Over a Quarter of a Century

NERVOUS and MENTAL DISEASES

FOR MILD CASES *FOR SEVERE CASES*

MICHELL FARM — **MICHELL SANATORIUM**

Licensed by State of Illinois

George W. Michell, M.D., Medical Director

INFORMATION ON REQUEST

106 North Glen Oak Ave., Ph. 3-5179, Peoria, Ill.

Chicago Office:

46 East Ohio Street . . . Phone Delaware 6770



in whooping cough

ELIXIR BROMAURATE

GIVES EXCELLENT RESULTS

Cuts short the period of illness and relieves the distressing spasmodic cough. Also valuable in Bronchitis and Bronchial Asthma.

In four-ounce original bottles. A teaspoonful every 3 to 4 hours.

Recommended in Medical Literature.

GOLD PHARMACAL CO. NEW YORK CITY

The NORBURY SANATORIUM

JACKSONVILLE, ILLINOIS INCORPORATED and LICENSED

For the Treatment of Nervous and Mental Disorders

DR. ALBERT H. DOLLEAR, Superintendent
DR. FRANK GARM NORBURY, Medical Director
DR. SAMUEL N. CLARK, Physician
DR. HENRY A. DOLLEAR, Associate Physician
DR. FREDERICK A. CAUSEY, Associate Physician in Residence

Address Communications THE NORBURY SANATORIUM, Jacksonville, Illinois

Kenilworth Sanitarium

Resident Staff
EDWARD J. KELLEHER, M. D.
Director
RICHARD D. HUFF, M. D.
Associate

Consultant Staff
THOMAS L. FENTRESS, M. D.
HARRY R. HOFFMAN, M. D.
SAMUEL H. KRAINES, M. D.
WILLIAM J. NOLAN, M. D.

A PRIVATE SANITARIUM FOR THE CARE AND TREATMENT OF MENTAL AND NERVOUS ILLNESSES, ALCOHOLISM AND DRUG ADDICTIONS

2228 BEECHWOOD AVE., WILMETTE, ILL.

Mailing address:
P. O. Box 600
Kenilworth, Ill.

Telephones
Wilmette 351
Wilmette 1662

Edward Sanatorium

NAPERVILLE, ILLINOIS
(30 miles west of Chicago)
Est. 1907 by Dr. Theodore B. Sachs

FOR THE TREATMENT OF TUBERCULOSIS

MEDICAL STAFF
Jerome R. Head, M.D.—Medical Director
Frank Seligson, M.D.—Medical Superintendent
Ideally situated — beautiful landscaped surroundings — modern buildings and equipment
A-A rating by Illinois Department of Health
For detailed information apply to—

Chicago Office of Edward Sanatorium
343 S. Dearborn St., Chicago
Wabash 8111

COSTEFF SANITARIUM
Mental and Nervous Disorders
Alcoholism and Drug Addiction

- **SHOCK TREATMENT** (Insulin, Metrazol Electro-shock) administered in suitable cases.
- **ARTIFICIAL FEVER THERAPY**

Home like environment, individual attention. MODERATE RATES.

Licensed by the State of Illinois
HARRY COSTEFF, M. D., Medical Director
1109 NO. MADISON AVE., PEORIA, ILL.
Phone 4-0156 Literature on request.

Radium Rental
Prompt Service
Deep X-Ray & Radium Therapy
Central X-Ray & Clinical Laboratory
F. F. Schwartz, M.D., Director
58 E. Washington St., Dear. 6811
CHICAGO, ILL.

BOOK REVIEWS (Continued)

ments the illustrations. Sidelights are presented on the Southwest Pacific, Saipan, Italy, D-Day in Normandy, the Burma Road, and the Warrior Comes Home. The importance of the medical profession from the "start to finish" is stressed as the physicians and surgeons moved up front with our army and navy. "These unarmed forces — trained to defend themselves with their bare hands in emergency — form a vital part of Uncle Sam's mighty fighting-machine. They are the paradox of war, for their mission is to save human life, and not to take it. This labor of devotion they perform with few headlines, though their deeds are epic."

Mackenzie pays tribute to Deputy Surgeon General Lull, a physician that we in Illinois will come to know better, and whom we shall probably welcome as a member of our state society. His duties at the home office of the American Medical Association in Chicago as assistant secretary and general manager, should make him a familiar figure in our daily life. To quote: "General Lull, like General Kirk, is efficient. On his broad shoulders falls the mountainous task of procurement of personnel and supplies, and the



FULLY APPROVED BY THE
AMERICAN COLLEGE OF SURGEONS

NORTH SHORE HEALTH RESORT
WINNETKA, ILLINOIS
on the Shores of Lake Michigan
A completely equipped sanitarium for the care of
nervous and mental disorders, alcoholism and drug addiction
offering all forms of treatment, including electric shock
Samuel Liebman, M.S., M.D.
Medical Director
225 Sheridan Road Phone Winnetka 211

Social & Educational Adjustment

for exceptional children of all ages. Visit the school noted for its work in educational development and fitting such children for more normal living. Beautiful grounds. Home atmosphere. Separate buildings for boys and girls. Get catalogue.

The MARY E. POGUE SCHOOL

112 GENEVA ROAD WHEATON, ILL.
(NEAR CHICAGO)

building and equipment of hospitals. It's his business, too, to keep the service around the world informed of new overall policies for treatment of patients."

This volume, "Men Without Guns" is not only graphically powerful, but those who are fortunate enough to possess it, will find the reading material an equally great and fitting tribute to the medical corps of the Army and Navy of the United States.

F.C.Z.

SYNOPSIS OF THE DIAGNOSIS OF THE SURGICAL DISEASES OF THE ABDOMEN; Second Edition. By John A. Hardy, B.Sc., M.D., F.A.C.S., El Paso, Texas; Published by The C. V. Mosby Company, St. Louis; 528 pages, with 100 illustrations. Price $5.00.

The importance of having an accurate diagnosis before attempting surgery in the abdominal cavity, or elsewhere, cannot be overestimated. Snap shot judgment is not enough to permit the degree of accuracy that is essential in good surgery today, hence the author has endeavored in

(*Continued on page 76*)

NO COLLECTION — NO CHARGE

20 years of friendly dealings with patients in your community have taught us how and when to collect.

Write. Our local men will do all the work of compiling the list. You just have to blue-pencil it.

NATIONAL DISCOUNT & AUDIT CO.

Herald Tribune Bldg. New York 18, N. Y.



Save -

TIME
LABOR
EXPENSE

for YOURSELF AND YOUR PATIENTS

For making office or home urine-sugar determinations, use the simple, no heating, easy tablet method provided by

CLINITEST

Urine-Sugar Test

For Your Office — Clinitest Laboratory Outfit (No. 2108)
Includes tablets for 180 tests; additional tablets can be purchased as required.

For Your Patients — Clinitest Plastic Pocket-Size Set (No. 2106)
Includes all essentials for testing in a small, durable, pocket-size case of Tenite plastic.

Also Available: ALBUMINTEST
Tablet, No Heating Method for Quick Qualitative Detection of Albumin. Bottles of 36 and 100.

Complete information upon request.

AMES COMPANY, Inc.

Elkhart Indiana

Lozenges
SULFATHIAZOLE 2½ GR.
ZEMMER

Sulfathlazole ..... 2½gr.
Benzocaine ..... 1/10gr.
Oil Wintergreen ..... q.s.

Chemists to the Medical Profession

THE ZEMMER COMPANY, OAKLAND STATION, PITTSBURGH 13, PA.



IL-2-46

MORPHINE AND OTHER DRUG ADDICTIONS
Selected patients who wish to make good and learn how to keep well; methods easy, regular, humane. Dr. Weirick's Sanitarium, Elgin, Ill.

THE STOKES SANITARIUM 923 Cherokee Road, Louisville, Kentucky

Our **ALCOHOLIC** treatment destroys the craving, restores the appetite and sleep, and rebuilds the physical and nervous condition of the patient. Liquors withdrawn gradually, no limit on the amount necessary to prevent or relieve delirium.

MENTAL patients have every comfort that their home affords.

The **DRUG** treatment is one of gradual Reduction. It relieves the constipation, restores the appetite and sleep; withdrawal pains are absent. No Hyoscine or rapid withdrawal methods used unless patient desires same.

NERVOUS patients are accepted by us for observation and diagnosis as well as treatment.

E. W. STOKES, Medical Director, Established 1904.
Telephone—Highland 2101

Classified Ads

RATES FOR CLASSIFIED ADVERTISEMENTS—For 30 words or less: 1 insertion, $3.00; 3 insertions, $8.00; 6 insertions, $14.00; 12 insertions, $24.00; from 30 to 50 words: 1 insertion, $4.00; 3 insertions, $10.50; 6 insertions, $20.00; 12 insertions, $30.00. Extra words: 1 insertion, 10c each; 3 insertions, 25c each; 6 insertions, 40c each; 12 insertions, 50c each. A fee of 25c is charged for those advertisers who have answers sent care of the Journal. Cash in advance must accompany copy.

FOR RENT: Morning hours to M.D. Two rooms and reception room — furnished. Loop Building. State St. Phone WEBster 3683 from 1 to 5 P.M. except Wed. and Sat.

WANTED: Physician for locum tenens beginning immediately. Write for information. 200 Republic Building. Cleveland 15, Ohio.

FOR SALE: 20 bed hospital, with all electrical equipment, and X-ray machine. Delivery room and nursery for obstetrical patients. Brick building, large territory, well established, located in Metropolis, Illinois, a city of 7000 population, surrounded by factories and good farming country. Can be bought at a reasonable price. Mrs. J. A. Fisher, Metropolis, Illinois.

FOR SALE—GENERAL ELECTRIC SNOOK X-RAY and fluoroscope, with 100 MA mechanically rectified generator and control; tilting table; Bucky, stereoscope, dark room and accessory equipment, screens, cassetts. Doctor retiring. Write Box 121, Illinois Medical Journal, 30 N. Michigan Avenue, Chicago 2, Illinois.

FOR SALE: Private practice. Un-opposed. Essential area Minnesota Catholic Community. Population 2000. Five room office. Fully equipped. Hospital facilities. Present doctor leaving on account of health. Write full particulars Box 122, Illinois Medical Journal, 30 N. Michigan, Chicago 2.

FOR SALE: Drugs & Equipment, brick building kept modern, 6 & 7 room apts. English basement for office, heated garage. Practiced in same location for 40 years. J. B. Ross M.D., 2030 Irving Park Road, Chicago 18, Illinois.

ESTABLISHED HOSPITAL FOR LEASE: A sanitarium for nervous, mental, alcoholic and drug cases, to a reputable physician or medical group. Doing an excellent business. Dr. E. W. Stokes, 923 Cherokee Road, Louisville 4, Kentucky.

BOOK REVIEWS (Continued)

this compact volume to give all of the steps in making the diagnosis of the surgical diseases of the abdomen.

Everyone attempting surgery well realizes the mimicry which is too often seen and which may lead to an improper diagnosis. The author stresses primarily in his book the careful taking of the history, the general physical examination and special tests or procedures which will aid in both eliminating other conditions which simulate a surgical abdomen, and likewise in arriving at the proper and definite evaluation of the true condition which exists.

Much space is devoted in this book to the considerations of the several perforative lesions, which frequently cause no little confusion on the part of the diagnostician as well as to the surgeon himself. All surgical diseases of the abdomen are given proper consideration, and the book is written in such a manner as to make it of much value to the practitioners who are compelled to do emergency surgery, and who will appreciate the many references which will aid materially in making a proper diagnosis of the existing condition.

The book pocket size, although containing more than 500 pages, is well illustrated, which adds materially to its value to the average reader. General practitioners not doing their own surgery will be well repaid by keeping this volume handy for quick reference, and will no doubt feel well repaid for the time and effort required to read those sections dealing with the type of lesion that is suspected, and will aid materially many times in the determination of the advisability of calling in the surgeon at the moment.



In *Cheilitis* from LIPSTICK

Introctable exfoliotive lip dermotoses moy often be traced to eosin lipstick dyes. Remove the offending irritonts, and the symptoms often disappear. In lipstick hypersensitivity, prescribe AR-EX NON-PERMANENT LIPSTICK—so cosmeticolly desiroble, yet free from all known irritonts. ***Send for Free Formulary.***

PRESCRIBE
℞
AR-EX
NON-PERMANENT
LIPSTICK

AR-EX COSMETICS, INC. 1036 W. VAN BUREN ST. CHICAGO 7, ILL.

Old Way . . .

CURING RICKETS in the CLEFT of an ASH TREE

FOR many centuries,—and apparently down to the present time, even in this country—ricketic children have been passed through a cleft ash tree to cure them of their rickets, and thenceforth a sympathetic relationship was supposed to exist between them and the tree.

Frazer* states that the ordinary mode of effecting the cure is to split a young ash sapling longitudinally for a few feet and pass the child, naked, either three times or three times three through the fissure at sunrise. In the West of England, it is said the passage must be "against the sun." As soon as the ceremony is performed, the tree is bound tightly up and the fissure plastered over with mud or clay. The belief is that just as the cleft in the tree will be healed, so the child's body will be healed, but that if the rift in the tree remains open, the deformity in the child will remain, too, and if the tree were to die, the death of the child would surely follow.

*Frazer, J. G.: The Golden Bough, vol. 1, New York, Macmillan & Co., 1923.



It is ironical that the practice of attempting to cure rickets by holding the child in the cleft of an ash tree was associated with the rising of the sun, the light of which we now know is in itself one of Nature's specifics.

New Way . . .

Preventing and Curing Rickets *with* MEAD'S OLEUM PERCOMORPHUM

NOWADAYS, the physician has at his command, Mead's Oleum Percomorphum, a Council-Accepted vitamin D product which actually prevents and cures rickets, when given in proper dosage.

Like other specifics for other diseases, larger dosage may be required for extreme cases. It is safe to say that when used in the indicated dosage, Mead's Oleum Percomorphum is a specific in almost all cases of rickets, regardless of degree and duration.

Mead's Oleum Percomorphum because of its high vitamins A and D content is also useful in deficiency conditions such as tetany, osteomalacia and xerophthalmia.

COUNCIL-ACCEPTED: Oleum Percomorphum With Other Fish-Liver Oils and Viosterol. Contains 60,000 vitamin A units and 8,500 vitamin D units per gram and is supplied in 10 c.c. and 50 c.c. bottles; and in bottles containing 50 and 250 capsules.

MEAD JOHNSON & COMPANY, EVANSVILLE, INDIANA, U.S.A.

Academy of Medicine
2 E 103 St
New York N Y
Exch



COLONIAL HALL
One of the 14 Units in "Cottage Plan"

FOR NERVOUS DISORDERS

MAINTAINING the highest standards for more than a half century, the Milwaukee Sanitarium stands for all that is best in the care and treatment of nervous disorders. Photographs and particulars sent on request.

Josef A. Kindwall, M. D.
Carroll W. Osgood, M. D.
William T. Kradwell, M. D.
Merle Q. Howard, M. D.
Lewis Danziger, M. D.
Russell C. Morrison, M. D.
Arthur J. Patek, M. D.

G. H. Schroeder
Business Manager

MILWAUKEE SANITARIUM

WAUWATOSA—WISCONSIN

PHYSICIAN'S CHICAGO OFFICE—1117 Marshall Field Annex—Wednesdays, 1-3 P.M.—Central 1162

THE N. [illegible] OF MEDICINE

The ILLINOIS Medical Journal

VOL. 89 NO. 3

March, 1946

In This Issue

Acute Surgical Thrombotic Emergencies

Thrombocytopenic Purpura Following Angina

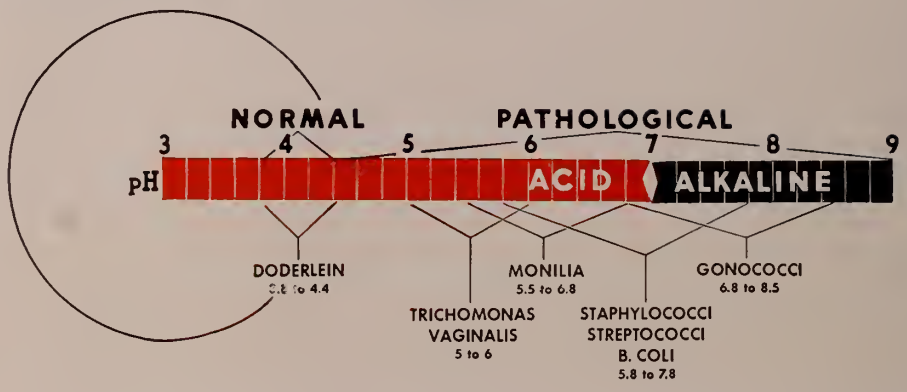
---- and Others

(See page 37 for complete Table of Contents)

ANNUAL MEETING, ILLINOIS STATE MEDICAL SOCIETY
PALMER HOUSE, CHICAGO, MAY 14, 15, 16, 1946

OFFICIAL JOURNAL OF THE ILLINOIS STATE MEDICAL SOCIETY

Control the pH



In acute or chronic vaginitis, Floraquin restores the normal pH, destroys pathogenic organisms and promotes rehabilitation of the vaginal mucous membrane with respect to its glycogen content.

FLORAQUIN contains the nontoxic protozoacide, *Diodoquin*, together with lactose and dextrose. This product of Searle Research brings about the reestablishment and maintenance of the normal range of vaginal acidity (pH 3.8 to 4.4) unfavorable to vaginal infections.

FOR OFFICE INSUFFLATION—Floraquin Powder in bottles of 1 oz. and 8 oz.

FOR HOME ROUTINE—Floraquin Tablets in boxes of 24.

Floraquin is the registered trademark of G. D. Searle & Co., Chicago 80, Illinois

SEARLE *Research in the Service of Medicine*

Entered as Second-Class Matter July 21, 1919, at the Post Office, Oak Park, Illinois, under the Act of March 8, 1879. Acceptance for mailing at special rate of postage provided for in Section 1102, Act of October 8, 1917, authorized July 15, 1918. Office of Publications, 715 Lake Street, Oak Park, Ill.

Leadership

is a job, not a reward

In the field of Professional Protection The Medical Protective Company has maintained leadership since 1899.

Our service in 60,000 claims and suits attests the worthiness of this Leadership and the obvious advantages which our exclusive application to this one field brings to our policyholders.

We Lead Because We Specialize

The

Medical Protective Company

of

Fort Wayne, Indiana

"topical

IN A STRICT SENSE OF THE TERM . . .



White's

Sulfathiazol Gum

IMPORTANT: Please note that your patient requires y
prescription to obtain this product from the pharma

"...sulfathiazole gum provides a method of chemotherapy for oropharyngeal use and is topical in a strict sense of the term, as shown by the extremely low blood levels of sulfathiazole resulting from intensive dosage with the preparation."

—FOX, NOAH, ET AL.: EFFECT OF SULFATHIAZOLE IN CHEWING GUM IN CERTAIN OROPHARYNGEAL INFECTIONS, ARCH. OF OTOLARYNGOLOGY, *41*:278-283 (APRIL) 1945.

When a single tablet of pleasantly flavored Sulfathiazole Gum is chewed for one-half to one hour it provides a high salivary concentration of locally active sulfathiazole averaging 70 mg. per cent. Moreover, resultant blood levels of the drug, even with maximal dosage, are so low (rarely reaching 0.5 to 1 mg. per cent) that systemic toxic reactions are virtually obviated.

INDICATIONS: Local treatment of sulfonamide-susceptible infections of oropharyngeal areas; acute tonsillitis and pharyngitis—septic sore throat—infectious gingivitis and stomatitis — Vincent's infection. Also indicated in the prevention of local infection secondary to oral and pharyngeal surgery.

DOSAGE: One tablet chewed for one-half to one hour at intervals of one to four hours, depending upon the severity of the condition.

If preferred, several tablets—rather than a single tablet—may be chewed *successively* during each dosage period without significantly increasing the amount of sulfathiazole systemically absorbed.

Available in packages of 24 tablets, sanitaped, in slip-sleeve prescription boxes

A PRODUCT OF **WHITE LABORATORIES, INC.**

PHARMACEUTICAL MANUFACTURERS • NEWARK 7, N. J.

Extinguish the Pillars of Fire . . .



Fed by psychosomatic "fuel" in the form of hypersecretion, vagus irritation and intestinal spasticity, many cases of hyperkinetic intestinal disease may often be effectively "quenched" by Lusyn — newly created in the research laboratories of The Maltbie Chemical Company to satisfy the most modern concepts of rational therapy in spastic gastro-enteropathies and hyperchlorhydria, with least disturbance of physiologic processes. • At once *antispasmodic* (by virtue of its homatropine methylbromide content) . . . *adsorbent* (through the alukalin component) and *sedative* (because of the phenobarbital incorporated)—Lusyn brings prompt relief, yet is non-narcotic and will not produce secondary acid rebound. • *Indicated* in the treatment of pylorospasm—cardiospasm—unstable colon—biliary dyskinesia—biliary colic—and as an adjunct in the management of peptic ulcer. *Supplied* in bottles of 100 tablets each.

THE MALTBIE CHEMICAL COMPANY (Founded 1888) NEWARK, N. J.

LUSYN
TABLETS



Be Sure

CORAMINE 5cc.

Is In Your Bag



BE SURE it's in *your* bag! Confidence in meeting the ever-present possibility of respiratory failure is assured when you know that you have the 5 cc. ampuls of Coramine with you. Prompt, powerful respiratory stimulation results from intravenous dosage of 5 cc. or more. Coramine's low toxicity, assuring a wide margin of safety, allows repetition of this dosage in cases where initial clinical response is not adequate.

CORAMINE—*Trade Mark Reg. U. S. Pat. Off.*

CIBA PHARMACEUTICAL PRODUCTS, INC.

SUMMIT · NEW JERSEY

Ciba



Steroid Hormones · Fine Pharmaceuticals



Third Degree

In severe thermal burns, when protein needs far exceed the limits of dietary toleration, Parenamine provides extra-dietary amino acids to restore and maintain positive nitrogen balance and correct hypoproteinemia.*

Parenamine

AMINO ACIDS STEARNS, PARENTERAL

For protein deficiency

PARENAMINE is a sterile 15 per cent solution of amino acids containing all known to be essential for humans, derived by acid hydrolysis from casein, fortified with pure *dl*-tryptophane.

INDICATED in conditions of restricted intake, faulty absorption, increased need or excessive loss of proteins such as in preoperative and postoperative management, extensive burns, delayed healing, gastro-intestinal disorders, fevers, et cetera.



ADMINISTRATION may be intravenous, intrasternal or subcutaneous.

SUPPLIED as 15 per cent sterile solution in 100 cc. rubber-capped bottles.

**Reprints and complete clinical data will gladly be sent on request.*

Frederick Stearns & Company
Division

DETROIT 31, MICHIGAN

NEW YORK KANSAS CITY SAN FRANCISCO WINDSOR, ONTARIO SYDNEY, AUSTRALIA AUCKLAND, NEW ZEALAND

Trade-Mark Parenamine Reg. U. S. Pat. Off.



no deception here

The false sense of security engendered upon resort to narcotic or anesthetic agents in the medical management of hemorrhoids is dangerous. For these drugs may mask more serious rectal pathology by dulling the normal sensory warning mechanisms.

With 'Anusol'* Hemorrhoidal Suppositories effective relief is obtained without deception. By means of decongestion, lubrication and protection, 'Anusol' Hemorrhoidal Suppositories bring comfort promptly, while enhancing early reversal of the varicose process . . . all without resort to narcotics or anesthetics, styptics or hemostatics.

Schering & Glatz, Inc., *a subsidiary of*

WILLIAM R. WARNER AND CO., INC., 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'anusol'

*Trademark Reg. U. S. Pat. Off.

Available in boxes of 6 and 12 suppositories

Hemorrhoidal Suppositories

Multiphasic Therapy

in the SYSTEMIC APPROACH TO ARTHRITIS

EACH CAPSULE OF DARTHRONOL CONTAINS:

Vitamin D (Irradiated Ergosterol)	50,000 U.S.P. units
Vitamin A (Fish-Liver Oil)	5,000 U.S.P. units
Vitamin C (Ascorbic Acid)	75 mg.
Vitamin B_1 (Thiamine Hydrochloride)	3 mg.
Vitamin B_2 (Riboflavin)	2 mg.
Vitamin B_6 (Pyridoxine Hydrochloride)	0.3 mg.
Niacinamide	15 mg.
Calcium Pantothenate	1 mg.
*Mixed Natural Tocopherols	3.4 mg.

*Equivalent in biological activity to 3 mg. of Alpha Tocopherol



"Rheumatoid arthritis is a systemic disease; the patient must be treated as a whole, rather than have local treatment to his joints alone."*

THIS statement by the American Rheumatism Association Committee is the keynote of the present successful method of treating arthritic patients. To produce the best results anti-arthritic therapy must combat not only the joint changes, but also the systemic disturbances so frequently encountered in chronic arthritis. This systemic approach requires a multiphasic therapeutic regimen which must include correction of disturbed physiologic functions, optimal nutrition, elimination of foci of infection, mental and physical rest, supervised exercise, physical therapy, and orthopedic measures.

Because of its rational composition, Darthronol merits inclusion in every anti-arthritic program. The pharmacodynamic and nutritional influence of its nine active ingredients makes it an efficacious therapeutic measure whenever the chronic arthritides must be combated.

*The Primer on Arthritis prepared by a Committee of The American Rheumatism Association and published in The Journal of the American Medical Association, volume 119, page 1089, August 1, 1942.

Complete bibliography on request

J. B. ROERIG & COMPANY
536 Lake Shore Drive
Chicago 11, Illinois

DARTHRONOL

A ROERIG PREPARATION

for topical Otologic chemotherapy



White's OTOMIDE

offers these unique clinical advantages

POTENTIATED ANTIBACTERIAL POTENCY
urea-sulfanilamide mixture more effective than either drug used independently.[1] Not inhibited by pus.

BETTER TISSUE DIFFUSION
more active diffusion of sulfanilamide through living and dead tissues due to urea content.[2]

INCREASED PHYSIOLOGIC DEBRIDEMENT
local therapy with urea in chronic otitis media brings about "a more adequate removal of the gross and microscopic debris in the recesses of the middle ear."[3]

WIDE FIELD
effective in BOTH acute AND chronic otologic infections. Active against sulfonamide-resistant bacteria.[4]

WELL TOLERATED
freedom from alkalinity virtually obviates local irritation.

ANALGESIC
provides effective chlorobutanol analgesia without impaired sulfonamide activity.

White's Otomide presents a stable, non-irritating solution of sulfanilamide, urea and chlorobutanol in a glycerin vehicle of unusually high hygroscopic activity.

White LABORATORIES, INC.
Pharmaceutical Manufacturers · Newark 7, N. J.

AVAILABLE IN DROPPER BOTTLES OF ONE-HALF FLUID OUNCE (15 cc.) ON PRESCRIPTION ONLY

FORMULA

SULFANILAMIDE	5%
CARBAMIDE (urea)	10%
CHLOROBUTANOL	3%
GLYCERIN (high sp. gr.)	q. s.

1. *Tsuchiya, H. M., et al.: Proc. Soc. Exp. Biol. and Med., 50:262, 1942.*
2. *McClintock, L. A. and Goodale, R. H.: U. S. Naval Med. Bull., 41:1057, 1943.*
3. *Mertins, P. S. Jr.: Arch. Otolaryng., 26:509, 1937.*
4. *Strakosch, E. A. and Clark, W. G.: Minn. Med., 26:276, 1943.*

FITTING ESTROGENIC THERAPY TO THE CASE



"Premarin" Liquid, No. 869 . . . for greater flexibility of dosage, and to provide a graduated estrogenic intake where required. Each teaspoonful is the equivalent, in potency, of one "Premarin" Half-Strength Tablet, No. 867.



"Premarin" Tablet, No. 866 . . . for severe estrogenic deficiencies requiring a highly potent yet essentially safe and well-tolerated preparation. Full therapeutic doses of "Premarin" induce a prompt response as judged by vaginal smears and by relief of subjective symptoms.



"Premarin" Tablet, Half-Strength, No. 867 . . . for "average" cases which can be controlled with less than full therapeutic doses. It is recognized that, in the menopause, the smallest effective dose of an estrogen is the *optimal* dose.

ACCEPTED
AMERICAN MEDICAL ASSN.
Council on Pharmacy and Chemistry

Highly Potent • Orally Active • Water Soluble • Naturally Occurring • Essentially Safe • Well Tolerated • Imparts a Feeling of Well-Being.

"Premarin"
Reg. U. S. Pat. Off.
CONJUGATED ESTROGENS
(equine)

Ayerst

AYERST, McKENNA & HARRISON LIMITED • 22 East 40th Street, New York 16, N. Y.

"don't smoke"...

IS ADVICE HARD FOR PATIENTS TO SWALLOW!

May we suggest, instead, *SMOKE "PHILIP MORRIS"?* Tests* showed 3 out of every 4 cases of smokers' cough cleared on changing to PHILIP MORRIS. Why not observe the results for yourself?

*Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154

TO THE PHYSICIAN WHO SMOKES A PIPE: We suggest an unusually fine new blend—COUNTRY DOCTOR PIPE MIXTURE. Made by the same process as used in the manufacture of Philip Morris Cigarettes.

Formulac



A NUTRITIONALLY ADEQUATE INFANT FOOD

FORMULAC is the trade-name for a new product—a reduced milk in liquid form—supplemented with sufficient vitamins and minerals to render it an adequate food for infants.

FORMULAC was developed by E. V. McCollum to fill a long-felt pediatric need for a milk containing sufficient vitamins and minerals to meet the nutritional requirements of a growing infant *without supplementary administration*. The McCollum method of incorporating vitamins into the milk itself eliminates the risk of maternal error or oversight.

FORMULAC, newly introduced on the market, is promoted ethically.

FORMULAC, supplemented by carbohydrates at your discretion, presents a flexible basis for formula preparation, readily adjustable to each individual child's needs.

FORMULAC has been tested clinically, and proved satisfactory in promoting infant growth and development. Priced within range of even low income groups, this inexpensive infant food is on sale at most drug and grocery stores.

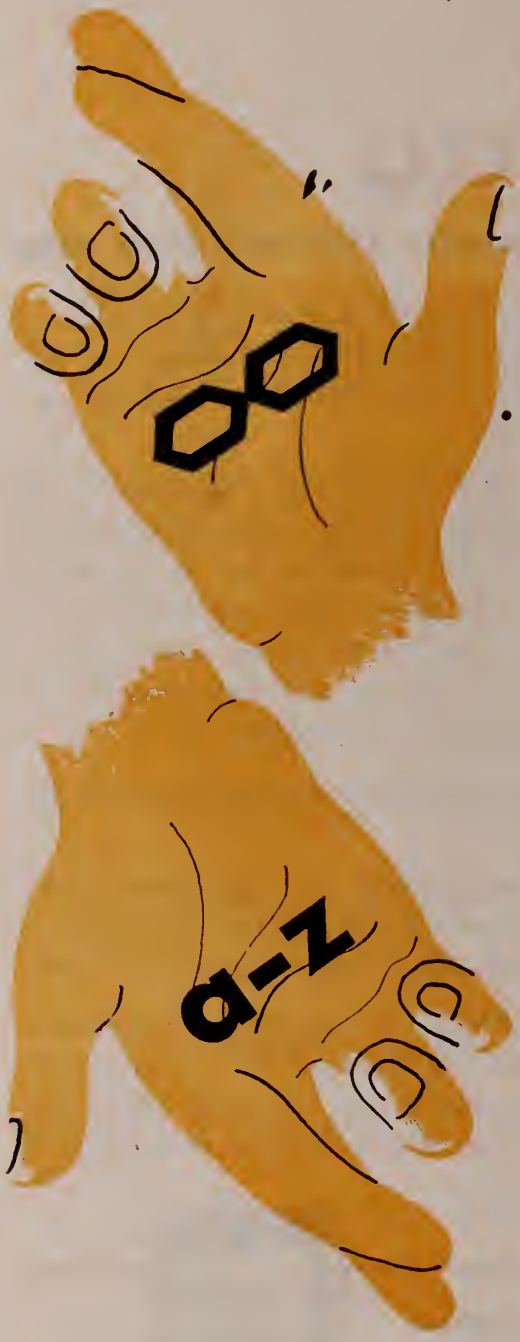


Distributed by
KRAFT FOODS COMPANY

ACCEPTED AMERICAN MEDICAL ASSN

• For professional samples and further information about FORMULAC, mail a card to National Dairy Products Company, Inc., 230 Park Avenue, New York 17, N. Y.

NATIONAL DAIRY PRODUCTS COMPANY, INC., New York, N.Y.



. . . like this

The sulfonamides and 'Alka-Zane'* Alkaline Effervescent Compound are like this!

There is a happy therapeutic relationship between the sulfonamides and 'Alka-Zane' Alkaline Effervescent Compound.

'Alka-Zane' Alkaline Effervescent Compound helps attain urinary alkalinity and increased fluid intake to prevent sulfonamide crystalluria and renal obstruction or damage at normal urinary pH levels.

The clean, fresh taste of 'Alka-Zane' Alkaline Effervescent Compound in cold water is eagerly welcomed by the febrile patient.

William R WARNER and Co. Inc 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'alka-zane'

alkaline effervescent compound

supplies the important bases of the alkaline reserve—sodium, calcium and magnesium as readily assimilable carbonates, citrates and phosphates. Available in bottles of 1½, 4 and 8 ounces (granules).

*Trademark Reg. U. S. Pat. Off.

STRENGTH AND ENDURANCE



may be impaired in middle-aged men when male sex hormone diminishes and the climacteric begins. For such patients, therapy with ORETON supplies needed testosterone and alleviates promptly the diverse symptoms of the disturbed endocrine balance.

With ORETON, androgen-deficient patients "register their appreciation of a definite change in the muscular system"[1] and are quickly aware of "greater mental ability, not only in concentration, but in fulfilling of social and economic responsibilities."[2]

ORETON
ORETON-M

ORETON in oil for intramuscular injection in ampules of 1 cc. containing 5, 10 and 25 mg. testosterone propionate. Average male climacteric patients require 25 mg. ORETON injected three times weekly, decreasing dosage and increasing the interval with improvement.

ORETON-M Tablets containing 10 mg. methyl testosterone may be used initially for mild climacteric symptoms, average dosage consisting of three to six tablets daily. Dosage may be adjusted subsequently to need.

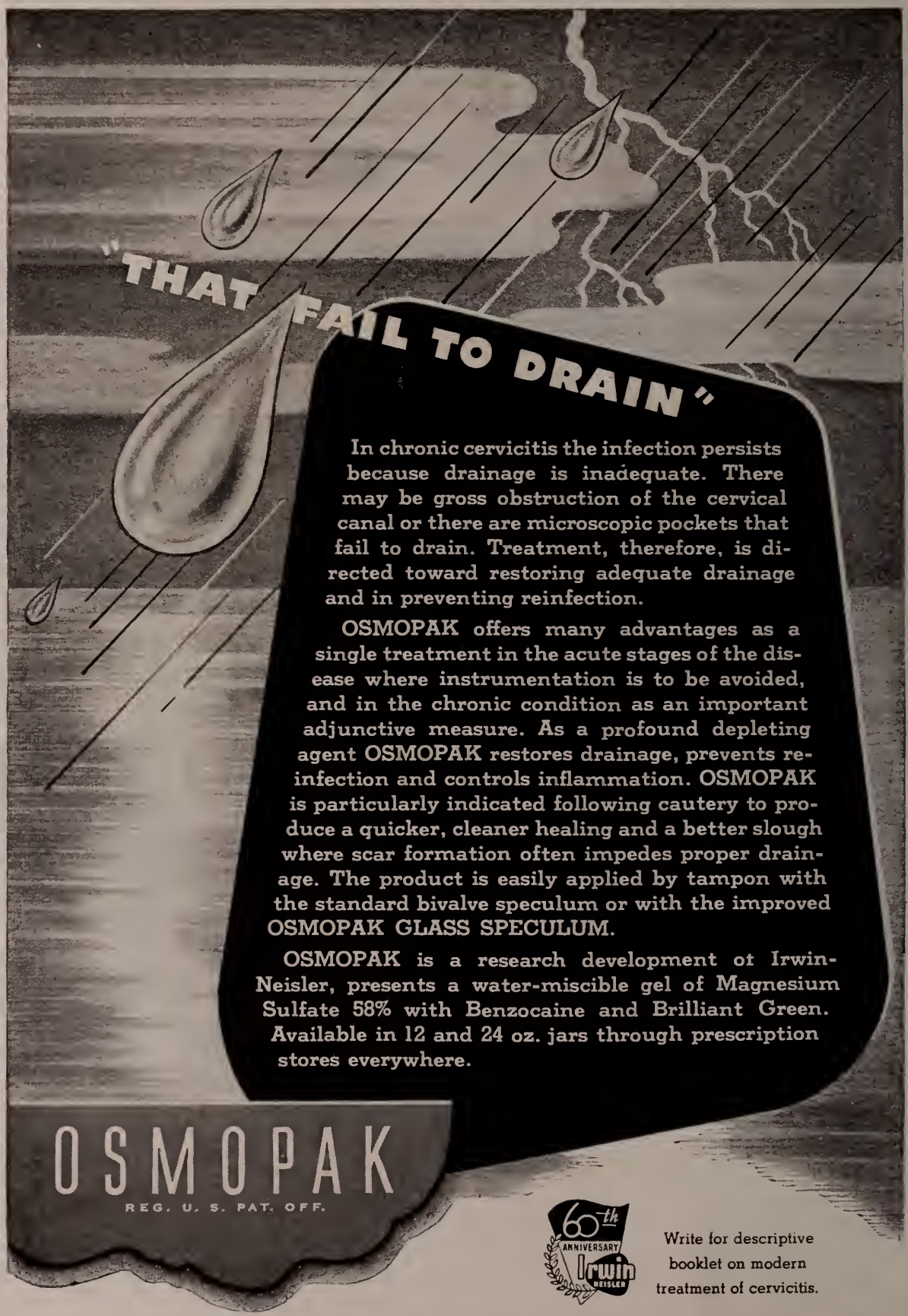
1. Kearns, W. M.: J. Clin. Endocrinol. 1:126, 1941.
2. Dunn, C. W.: Delaware State M. J. 11:76, 1939.

TRADE-MARKS ORETON AND ORETON-M — REG. U. S. PAT. OFF.

SCHERING

Schering CORPORATION • BLOOMFIELD, N. J.

IN CANADA: SCHERING CORPORATION LIMITED, MONTREAL


"THAT FAIL TO DRAIN"
In chronic cervicitis the infection persists because drainage is inadequate. There may be gross obstruction of the cervical canal or there are microscopic pockets that fail to drain. Treatment, therefore, is directed toward restoring adequate drainage and in preventing reinfection.
OSMOPAK offers many advantages as a single treatment in the acute stages of the disease where instrumentation is to be avoided, and in the chronic condition as an important adjunctive measure. As a profound depleting agent OSMOPAK restores drainage, prevents reinfection and controls inflammation. OSMOPAK is particularly indicated following cautery to produce a quicker, cleaner healing and a better slough where scar formation often impedes proper drainage. The product is easily applied by tampon with the standard bivalve speculum or with the improved OSMOPAK GLASS SPECULUM.
OSMOPAK is a research development of Irwin-Neisler, presents a water-miscible gel of Magnesium Sulfate 58% with Benzocaine and Brilliant Green. Available in 12 and 24 oz. jars through prescription stores everywhere.
OSMOPAK
REG. U. S. PAT. OFF.
60th ANNIVERSARY Irwin NEISLER
Write for descriptive booklet on modern treatment of cervicitis.
IRWIN, NEISLER & CO., DECATUR, ILLINOIS



a troublesome symptom . . .



Alumina Gel with Liquid Petrolatum 10% Wyeth

"All patients with peptic ulcer eventually develop constipation."[1] Low residue diet, inactivity and worry are responsible. But the troublesome symptom can be controlled by development of "habit time" and administration of emulsified mineral oil.

AMPHOJEL*, the standard antacid for the management of peptic ulcer, is also supplied with emulsified mineral oil as a convenient dosage form for ulcer patients with a tendency to constipation.

1. PAUL, W. D., and C. RHOMBERG, J. Iowa State M. A. *35*:167 (May) 1945.

*REG. U. S. PAT. OFF.

Bottles of 12 fl. oz.

AMPHOJEL

WITH MINERAL OIL

Wyeth

REG. U. S. PAT. OFF.

WYETH INCORPORATED • PHILADELPHIA 3 • PA.

MASTER BUILDERS *of* ENDOCRINOLOGY



JOHN JACOB ABEL
1857-1938

John Jacob Abel stands high among the pioneers who helped to elevate American scientific medicine to the place it now occupies.

In 1897 he isolated a benzoyl derivative of the active principle of the adrenal medulla (epinephrine).

The Master Builders of medical and allied sciences have contributed a rich legacy of literature, techniques, and materials wherewith the human spirit may reach to all the horizons appropriate to it.

The management and staff of The Harrower Laboratory, Inc., feel that they can do no less than follow their original creed:

> *"to develop information . . . and to materialize the means whereby this may be applied."*

THE HARROWER LABORATORY · GLENDALE CALIFORNIA · *At Your Service*

The HARROWER LABORATORY, *Inc.*
Endocrines and Pharmaceuticals of Distinction
GLENDALE 5, CALIFORNIA
NEW YORK 7 DALLAS 1 CHICAGO 1



24-hour cultures. *Left*—Sterile water in cup; *Right*—Phe-Mer-Nite in cup. Phe-Mer-Nite dilutions of 1:125,000 to 1:1,000,000 inhibit the growth of streptococci, staphylococci, B. coli, B. typhosus, etc. Dilutions of 1:12,500 to 1:37,500 destroy spore-formers such as B. welchii, B. tetani, and B. chauvei.

High Bactericidal Power - Minimal Tissue Toxicity

Phe-Mer-Nite is powerfully bactericidal and fungicidal, yet nonirritating and harmless to tissue in the recommended dilutions. It does not hemolyze red blood cells, does not precipitate tissue proteins, has no offensive odor, does not stain. It maintains its bactericidal and fungicidal powers in the presence of blood, pus or exudates. It is stable to light and high temperatures; long standing does not reduce its potency.

Both on intact surfaces and in open wounds, Phe-Mer-Nite fulfills every need for dependable antisepsis. It may be applied to burns or other lesions requiring antisepsis, and is useful as a douche, nasal spray, gargle, and for the sterilization of instruments and rubber gloves. Phe-Mer-Nite is particularly useful in the treatment of ringworm infestations.

PHE-MER-NITE PREPARATIONS



Phe-Mer-Nite, a brand of phenylmercuric nitrate, is an organic salt of mercury of low toxicity and high germicidal power.

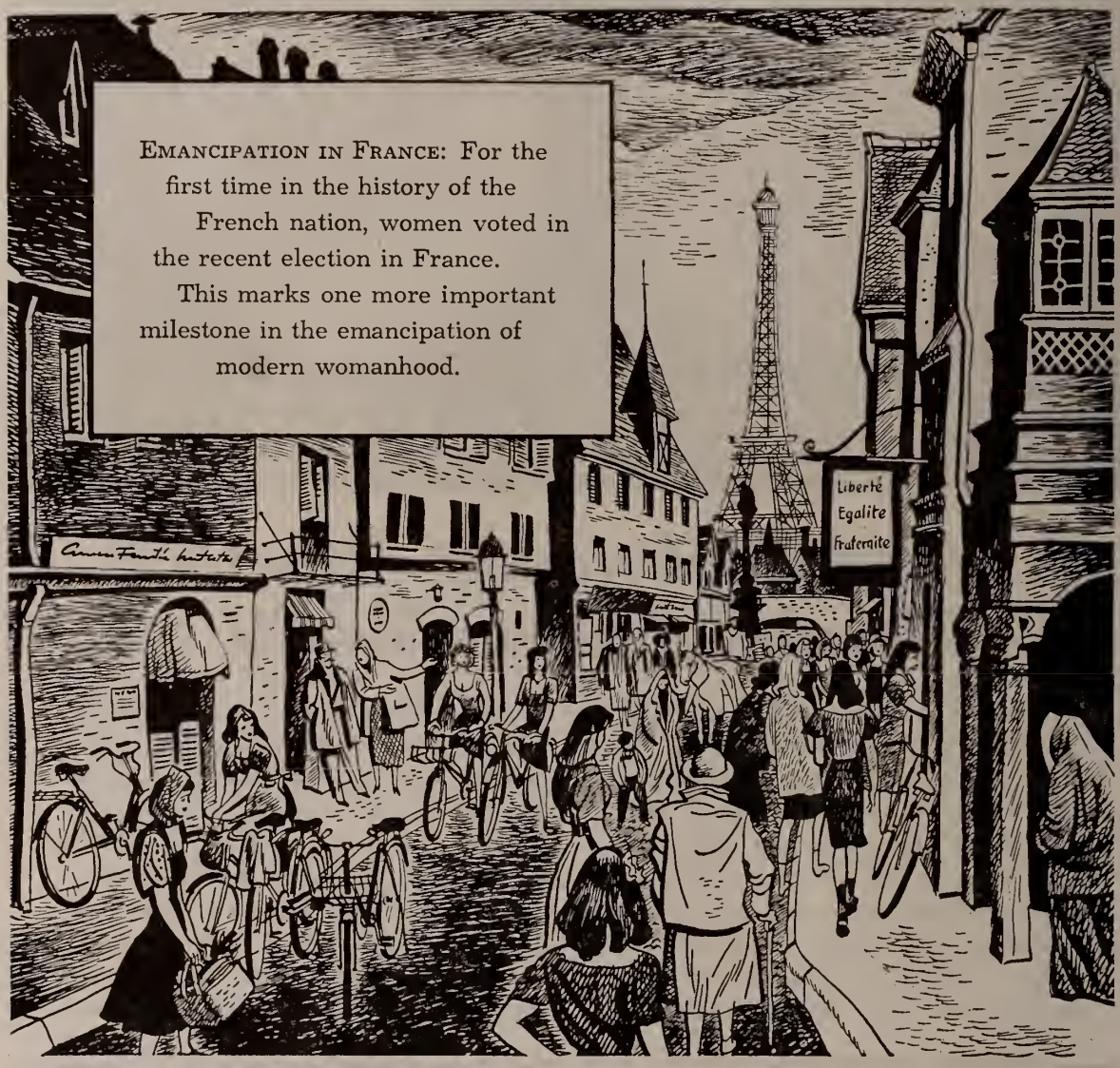
Available as a tincture, solution, in cholesterinized or greaseless base, in throat tablets, and in foot powder.

THE S. E. MASSENGILL COMPANY
Bristol, Tenn.-Va.

NEW YORK • SAN FRANCISCO • KANSAS CITY

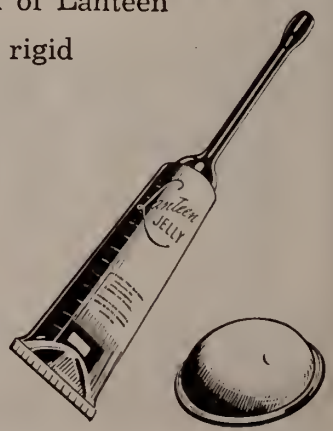
SEMCO

Toward a Better World



Another example of progressive thinking with a view to future sociological betterment, is Lanteen Medical Laboratories, in their promotion of Lanteen Products—leaders in their field—produced under the most rigid scientific standards.

Instructions for correct placement of the Lanteen Flat Spring Diaphragm are easily understood. Since it is collapsible in one plane only, should entering rim of diaphragm become lodged against the cervix, the other rim cannot be forced into pubic arch if largest comfortable size is fitted. Available only on physician's prescription or recommendation. Distributed ethically. Complete information upon request.



LANTEEN

COPYRIGHT 1946, LANTEEN MEDICAL LABORATORIES, INC., CHICAGO 10

no bribe, no wheedle, no threat



The many youngsters who require the appetite-stimulating impetus of the vitamin B complex will take 'Ryzamin-B' No. 2 without bribe, threat, or coaxing. They love—and ask for—this flavorsome, honey-like preparation—as a spread with jam or peanut butter, dissolved in milk, fruit juice or other beverage, or directly from its special measuring spoon. 'Ryzamin-B' No. 2 caters to the finicky palate of young and old.

'Ryzamin-B' No. 2 is a concentrate of oryza sativa (American rice) polishings. Its rich natural vitamin B is enhanced with pure crystalline B factors.

Only three grams daily provide: Vitamin B_1 (Thiamine Hydrochloride) 3 mgm. (1,000 U.S.P. Units); Vitamin B_2 (Riboflavin) 2 mgm.; Nicotinamide 20 mgm. and other factors of the B complex. Gram measuring spoon with each packing... Tubes of 2 oz. and bottles of 8 oz.

'Ryzamin-B' BRAND

RICE POLISHINGS CONCENTRATE

No. 2

WITH ADDED THIAMINE HYDROCHLORIDE, RIBOFLAVIN AND NICOTINAMIDE

'Ryzamin-B' registered trademark.

BURROUGHS WELLCOME & CO. (U.S.A.) INC.
9 & 11 EAST 41ST ST.
NEW YORK 17



In hunger, half a loaf may be better than none, but for vitamin deficient tissues "indiscriminate administration of large amounts of individual members of the B complex, particularly thiamine, may lead to other deficiencies."[1] Solu-B* delivered by muscle or by vein brings to deficient tissues all major crystalline factors in a massive dose totaling 325 mg. of B complex factors balanced to approximate the ratios in which they occur in good, nutritionally adequate diets.

Each vial of Solu-B contains:

Thiamine Hydrochloride	10 mg.	Pyridoxine Hydrochloride	5 mg.
Riboflavin	10 mg.	Calcium Pantothenate	50 mg.
		Nicotinamide	250 mg.

Available in packages of 5 (10 cc.) vials with 5 (5 cc.) ampoules sterile water; and in packages of 25 vials without diluent.

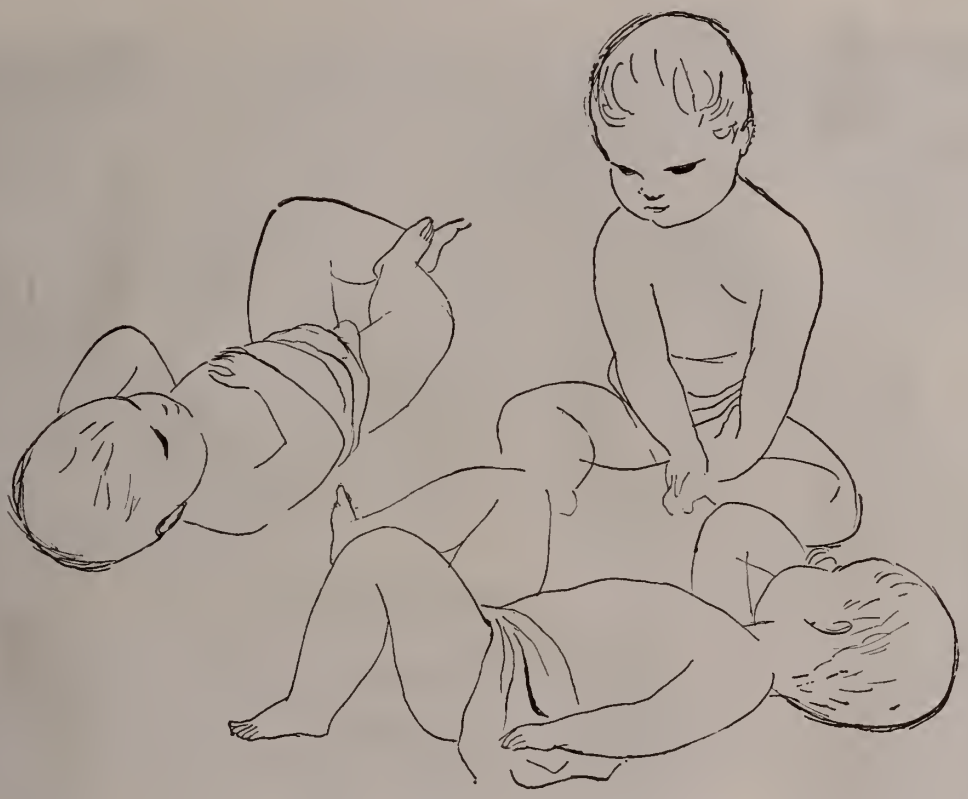
*Trademark Reg. U. S. Pat. Off.

1. J.A.M.A. 129:74 (Sept. 1) 1945

Upjohn
KALAMAZOO 99, MICHIGAN

FINE PHARMACEUTICALS SINCE 1886

Solu-B



Three not thirty

Just 3 drops of Navitol, not the 5 to 30 drop dosages of less potent preparations, supplies the full basic daily requirements of both vitamins A and D.

Highly concentrated Navitol is easy to take, well tolerated, effectively absorbed and economical. Three drops supply 5,000 U.S.P. units of vitamin A, 1,000 U.S.P. units of vitamin D—the maximum potencies as specified by U.S.P. XII.

Navitol
TRADEMARK
WITH VIOSTEROL

SQUIBB

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858



PAIN

A CAUSE OF DISASTROUS INATTENTION

From Pearl Harbor to "V-J" Day accidents caused the deaths of more Americans on the "home-front" than were killed in action.*

Pain can be an ever-present cause of accidents. A spasm—preoccupation—loss of sleep resulting in dulled reflexes—inattention—and a disastrous accident occurs.

"Of all symptoms, pain is most important; it is one from which the patient must have relief."**

For the relief of symptomatic pain in headache, neuralgia, dysmenorrhea and the common cold,

ASPIROCAL

(McNeil)

is indicated as a safe, effective analgesic. Since a prescription is required for Aspirocal, its use remains under the physician's control—self-medication is effectively discouraged.

Trial supplies of Aspirocal are available to physicians on request.

Aspirocal combines the analgesic effect of acetylsalicylic acid (4 gr.) and mild sedation of Butisol (5-ethyl-5-secondary butyl barbituric acid "McNeil") (⅓ gr.) with calcium gluconate (2 gr.). Caution: Use only as directed.

Supplied in bottles of 100, 500 and 1000 tablets

*Safety and Accident Prevention: An interview with Bauer, W. W., Peterson, C. M., Dearborn, N. H. and Hester, H., Hygeia, 23:666-(Sept.) 1945.

**Handbook of Therapy, Chicago, Published by American Medical Association, 1935, p. 58.

McNeil Laboratories
INCORPORATED
PHILADELPHIA • PENNSYLVANIA



The combined use of an occlusive diaphragm and vaginal jelly remains, in the published opinions of competent clinicians, the most dependable method of conception control.

Dickinson[1] has long held that the use of jellies alone cannot be relied upon for complete protection. It is noteworthy that in the series of patients studied by Eastman and Scott[2], an occlusive diaphragm was employed in conjunction with a spermicidal jelly for effective results. Warner[3], in a carefully controlled study of 500 patients, emphasized the value of a diaphragm.

In view of the preponderant clinical evidence in its favor, we suggest that physicians will afford their patients a high degree of protection by prescribing the diaphragm and jelly technique.

You assure quality when you specify a product bearing the "RAMSES"* trademark.

1. Dickinson, R. L.: Techniques of Conception Control. Baltimore, Williams and Wilkins Co., 1942.
2. Eastman, N. J., and Scott, A. B.: Human Fertility 9:33 (June) 1944.
3. Warner, M. P.: J. A. M. A. 115:279 (July 27) 1940.

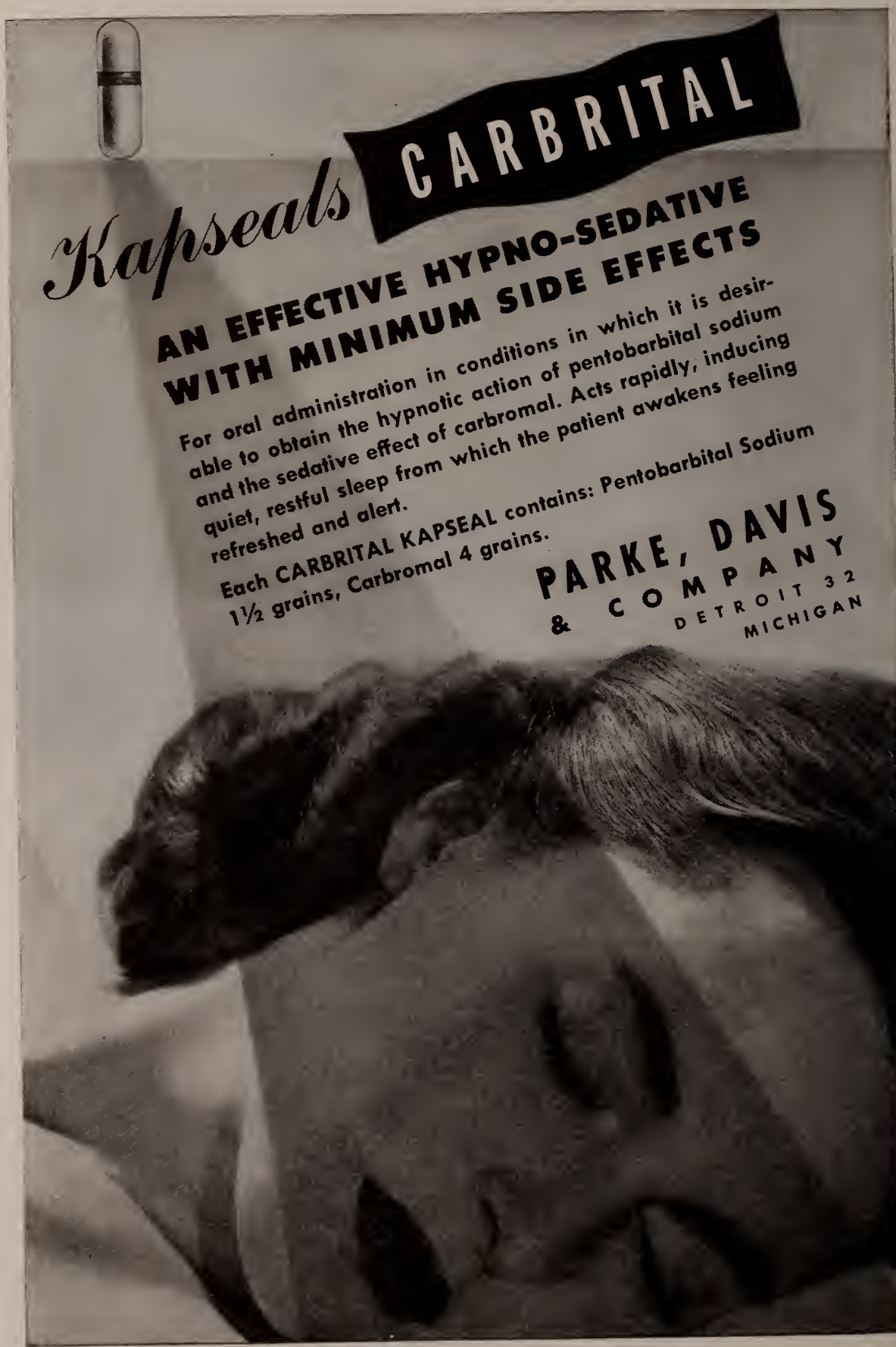
gynecological division

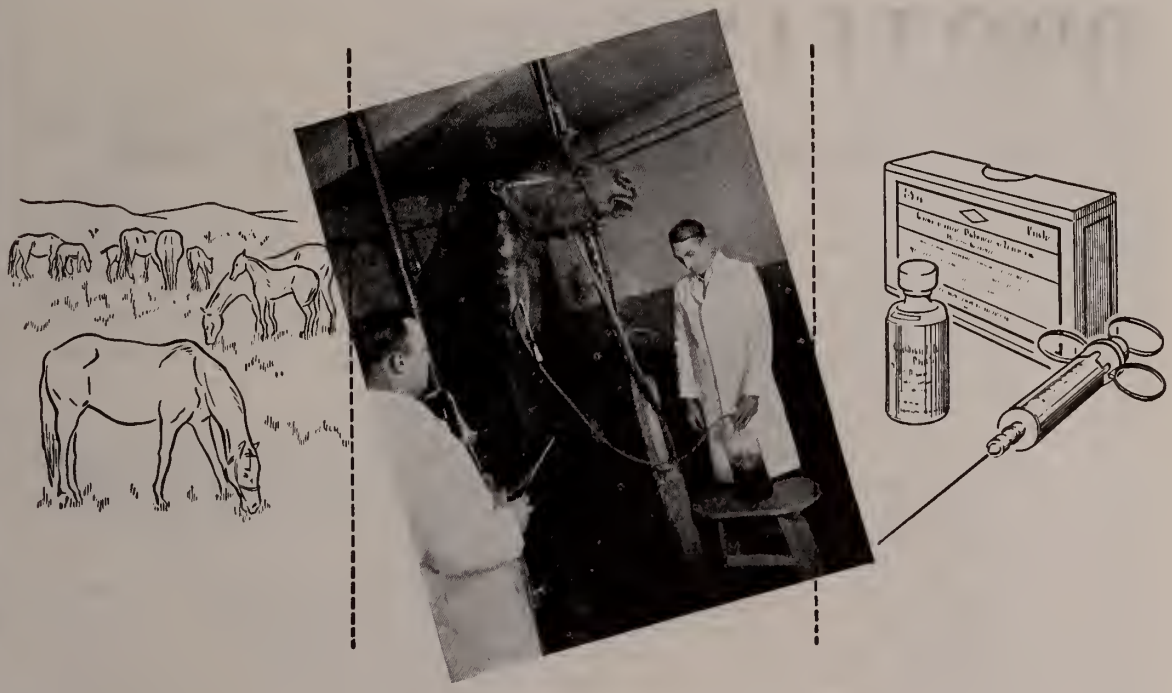
JULIUS SCHMID, INC.

Quality First Since 1883

423 West 55 Street New York 19, N. Y.

*The word "RAMSES" is a registered trademark of Julius Schmid, Inc.


Kapseals
CARBRITAL
AN EFFECTIVE HYPNO-SEDATIVE
WITH MINIMUM SIDE EFFECTS
For oral administration in conditions in which it is desirable to obtain the hypnotic action of pentobarbital sodium and the sedative effect of carbromal. Acts rapidly, inducing quiet, restful sleep from which the patient awakens feeling refreshed and alert.
Each CARBRITAL KAPSEAL contains: Pentobarbital Sodium 1½ grains, Carbromal 4 grains.
PARKE, DAVIS & COMPANY
DETROIT 32 MICHIGAN



"NOT HOW MUCH... BUT HOW WELL"

U. S. STANDARD PRODUCTS CO.

BIOLOGICALS

AMPULS AND STERILE SOLUTIONS FOR PARENTERAL ADMINISTRATION

An ideal location in a small rural community favors concentration on the important work in which we specialize—

Patented processes confer distinct therapeutic advantages—

Methods and thinking based upon the advanced frontiers of progress—

—These are factors contributing to the established acceptance of U. S. Standard Products by those of the medical profession who have come to regard them as essential.

U. S. Standard Products are now available at leading pharmacies throughout most of the United States. May we send you detailed information?

OUTSTANDING U. S. STANDARD BIOLOGICALS:

DIPHTHERIA TOXOID
SMALLPOX VACCINE
TETANUS ANTITOXIN
TYPHOID VACCINE

Also a representative list of glandular products and pharmaceuticals.

U. S. STANDARD PRODUCTS CO.

WOODWORTH, WISCONSIN, U. S. A.

PROTEIN

*"As a Prophylactic and Therapeutic Agent"**

"There are many opportunities for practical dietary application of the advances in our understanding of protein economy. The provision of liberal protein diets in instances where the value of protein has been demonstrated offers both prophylactic and therapeutic advantages to the patient."

PREGNANCY AND LACTATION

"Protein is one of the essentials for which there is greater need.... The growth needs of the fetus must be met and if adequate dietary protein is not supplied, the mother's protein stores will be drained.... The demands for protein during lactation are even greater.... One further reason for providing a liberal supply of protein... lies in the favorable effect which protein has upon calcium absorption."

DISEASES OF THE KIDNEY

"... actual improvement in the well-being of nephritic patients may be observed following the use of high-protein diets both in adults and children. In some instances functional capacity of the kidneys has been reported to improve on such a regime.... For the treatment of nephrosis the same dictum holds true, only to a greater extent...."

DISEASES OF THE LIVER

"For many years carbohydrate alone has been considered the one substance capable of providing protection for the liver cells. ... Protein has now been shown to be considerably more effective in this respect. ... The effect of protein on the liver is not only reparative, but also definitely protective against the agents known to be toxic to the liver...."

PEPTIC ULCER

"... a rather high incidence of moderate hypoproteinemia in peptic ulcer cases has been reported. Any ulcer, be it peptic, infectious, or the result of pressure and circulatory changes, represents a loss of tissue and requires protein for rebuilding...."

OTHER CONDITIONS

"In old age, for instance, all too often the food intake deteriorates to soft foods of limited variety.... Yet in such instances the same protein requirements for maintenance of the numerous body functions are still in effect.... Protein may also be lost because of its excessive breakdown under the influence of fever or heightened body metabolism, and negative nitrogen balances may develop, as for instance in hyperthyroidism....

"With the demonstration of this increased importance of protein dietetic therapy, it can only be recommended that there be an increased use of high-protein diets."

Among the protein foods of man meat ranks high not only because of the percentage of protein contained, but primarily because the protein of meat is of high biologic quality, applicable for every protein need.

*Anderson, Geo. K., M.D.: *The Importance of Protein in Diet Therapy,* J. Am. Dietet. A. 21:436 (July-August) 1945.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods and Nutrition

AMERICAN MEAT INSTITUTE

MAIN OFFICE, CHICAGO . . . MEMBERS THROUGHOUT THE UNITED STATES



Bridge the "nutritional gap"

The nutritional benefits of milk need not be deprived the "milk-sensitive" patient, even though successful treatment demands complete elimination of the offending food from the diet.

Clinical evidence has established MULL-SOY as an effective hypoallergenic substitute for cow's milk. This concentrated, emulsified soy bean food—homogenized and sterilized—closely approximates cow's milk in protein, fat, carbohydrate and mineral content. It is palatable, well tolerated, easy to digest and easy to prepare. Infants (particularly) thrive on MULL-SOY, and take it readily.

Write for copies of "Tasty Recipes for Mull-Soy in Milk-Free Diets", for your milk-allergic patients.

BORDEN'S PRESCRIPTION PRODUCTS DIV., 350 MADISON AVE., NEW YORK 17, N. Y.

MULL-SOY

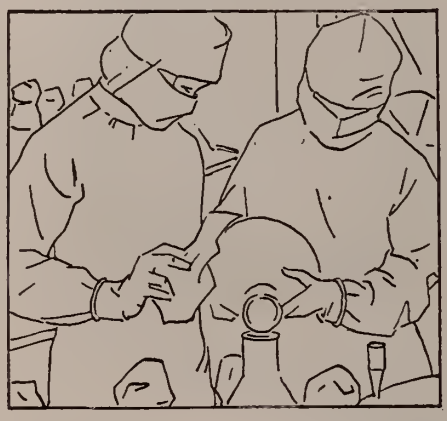
HYPOALLERGENIC SOY BEAN FOOD

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods

MULL-SOY is a liquid emulsified food prepared from water, soy bean flour, soy bean oil, dextrose, sucrose, calcium phosphate, calcium carbonate, salt and soy bean lecithin, homogenized and sterilized. Available in 15½ fl. oz. cans at all drug stores.

PENICILLIN SCHENLEY CONTROL

here . . .



. . . *insures your confidence here*



SCHENLEY LABORATORIES, INC.
Producers of Penicillin Schenley
Executive Offices:
350 Fifth Avenue, New York City

A vast system of rigid control insures maximum purity and unvarying potency for Penicillin Ointment Schenley. In addition, it possesses a high degree of stability, remaining stable over long periods when kept at recommended temperature.

Members of the medical profession can specify Penicillin Ointment Schenley with complete confidence that skill and precision in production insure its uniformly high degree of purity and stability.

Your Local Distributor for **PENICILLIN Ointment** SCHENLEY *is:*

CHICAGO
Chemists Supply Company
Debs Hospital Supplies
Illinois Surgical Supply Co.
Sheridan Physicians Supply Co.
Thompson Medical Supply

EVANSTON
D. S. Lyman, Pharmacist

MOLINE
Otto Schweinberger & Company

PEORIA
Sutliff & Case Co., Inc.

ESKADIAZINE

makes oral sulfadiazine therapy easier



ESKADIAZINE—the ideal oral sulfadiazine—has these three advantages:—

1 **Fluid Form.** This new fluid sulfadiazine is the ideal oral dosage form, especially for infants and children, and also for the many adults who object to tablet medication. Each 5 cc. (1 teaspoonful) contains 0.5 Gm. (7.7 gr.) of sulfadiazine.

2 **Exceptional Palatability.** Eskadiazine is so surprisingly palatable and pleasant in consistency that it is accepted willingly by all types of patients. Children actually like to take it.

3 **More Rapid Absorption.** The findings of a recent clinical study by Flippin and associates (Am. J. M. Sc., Aug. 1945) indicate that with Eskadiazine desired serum levels may be far more rapidly attained than with sulfadiazine administered in tablet form.

Smith, Kline & French Laboratories, Philadelphia, Pa.

S.K.F.'s new, outstandingly palatable fluid sulfadiazine for oral use

"SIMPLICITY"
"HARMLESSNESS"
"LOW COST"
ARE THE CHIEF ADVANTAGES OF
Progestoral
'ROCHE-ORGANON'

You will find oral luteal therapy with Progestoral (anhydro-hydroxy-progesterone 'Roche-Organon') especially useful in your practice since anhydro-hydroxy-progesterone offers "many advantages, such as simplicity, harmlessness and low cost;"* moreover, it has "essentially the same clinical effects as progesterone."* When you prescribe Progestoral, you obviate the disadvantages of parenteral therapy while providing effective relief for patients suffering from premenstrual tension, dysmenorrhea, functional uterine bleeding, and spontaneous abortion. Progestoral is available in 5-mg and 10-mg tablets, boxes of 20, 40, 100, and 250. Write for literature on the clinical use of Progestoral . . . ROCHE-ORGANON, INC., ROCHE PARK, NUTLEY 10, N. J.



*F. E. Harding, *Am J. Obst. & Gynec.*, 50:56, 1945



Chart indicating the drop in serum salicylate level when sodium bicarbonate is administered concurrently with sodium salicylate.

The administration of sodium bicarbonate to relieve gastric distress during salicylate therapy of rheumatic fever prevents the establishment of high plasma salicylate levels. Recent investigations[1] have shown that this antacid depresses the serum salicylate level far below the 350 micrograms per cc. believed to be required to suppress the "rheumatic reaction".[2] Sodium bicarbonate is *unnecessary* when Salysal is prescribed, for Salysal is insoluble in the acid medium of the stomach and thus *does not produce* gastric distress. Furthermore, since Salysal is twice as active therapeutically as sodium salicylate, it is clearly a drug of choice in massive therapy where the objective is to give salicylates in as large doses as can be tolerated.

Tablets, 5 grains, bottles of 50, 250 and 1000. Powder, 1 oz. bottles.

1 Smull, K., Wegria, R., and Leland, J.: The Effect of Sodium Bicarbonate on the Serum Salicylate Level, J.A.M.A. *125*:1173 (Aug. 26) 1944.

2. Coburn, A. F.: Salicylate Therapy in Rheumatic Fever, Bulletin Johns Hopkins Hospital *73*:435-464, December, 1943

SALYSAL SALICYLIC ESTER OF SALICYLIC ACID

ACCEPTED AMERICAN MEDICAL ASSN Council on Pharmacy and Chemistry

RARE CHEMICALS, INC., HARRISON, NEW JERSEY

853 West Coast Distributors, GALEN CO., Berkeley 2, California



Whenever absorption is in doubt –

(of oral Vitamin B complex)

use

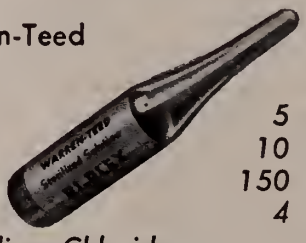
WARREN-TEED *Ri-Plex*

For Parenteral Administration

The problem of absorption of vitamin B complex is eliminated by the use of parenterally administered WARREN-TEED RI-PLEX. Even though gastro-intestinal malfunction or vomiting of pregnancy is present, the vitamin B complex dosage is fully effective — highly beneficial in relieving either condition.

Secondary anemia patients may respond better to parenteral vitamin B administration. Whenever there is doubt about absorption and utilization of oral dosage — consider parenteral injection of vitamin B complex — WARREN-TEED RI-PLEX.

Each 2cc. ampul of Warren-Teed Ri-Plex contains:



Pyridoxine Hydrochloride	*5 mg.*
Thiamine Hydrochloride	*10 mg.*
Nicotinamide	*150 mg.*
Riboflavin	*4 mg.*

in Isotonic Solution of Sodium Chloride

WARREN-TEED

Medicaments of Exacting Quality Since 1920

THE WARREN-TEED PRODUCTS COMPANY, COLUMBUS 8, OHIO

Warren-Teed Ethical Pharmaceuticals: capsules, elixirs, ointments, sterilized solutions, syrups, tablets. Write for literature.

Table of Contents

MARCH, 1946
VOL. 89, NO. 3

ORIGINAL ARTICLES

Acute Surgical Thrombotic Emergencies, *Joseph E. Bellas, M.D., F.A.C.S., A.B.S.*, Peoria 116
Thrombocytopenic Purpura Following Angina, *Kenneth M. Carroll, M.D.*, Evanston 121
Allergic Iritis, *Louis Bothman, M.D.*, Chicago .. 124
Urologic Neurosis and Pyschoses, *C. Otis Ritch, B.S., M.D., F.A.C.S.*, Chicago 131
Therapeutic Techniques used with a Special Group of Disturbed Children, *Erwin Angres, M.D.*, Chicago 133

EDITORIALS

Constructive Program of the American Medical Association for the Improvement of Medical Care 101
Harrison H. Shoulders, M.D.; President-Elect of the A.M.A. 103
American Medical Association Voluntary Prepayment Sickness Plan 104
Mobile X-Ray Units 105
Radio Programs 106
P.R.N., *Charles G. Farnum, M.D.* 58
Book Reviews 60

CORRESPONDENCE

U.S. Public Health Service Needs Physicians ... 107
Meeting for Goiter Study 107
Preceptorships 108
United Nations Relief and Rehabilitation Administration 108
Urology Award 109
National Gastroenterological Association 1946 Award Contest 109
Cancer Committees Merge 109
Dieticians to Meet 109
Course in Pediatrics 109

STATE DEPARTMENT OF PUBLIC HEALTH

Facilities for the Rapid Treatment of Syphilis .. 110
Blood Plasma 111
The 1945 Record of Vital Statistics 112

PHYSICAL MEDICINE ABSTRACTS 137

MEDICINE AND THE ARMED FORCES

Surplus Medical Equipment for Veterans of World War II 140
5,000 ASTP Medical Officers to be called as Replacements 141
Reconversion of 9-9-9 Program 141
Capt. Blair is State Medical Officer of Selective Service System 142
Army Awards and Commendations 142
Consultants Named for Veterans' Hospitals 142

NEWS OF THE STATE

Coming Meetings, Personals, Marriages, Deaths . 143

WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

POSTGRADUATE COURSES 1946

For Returning Medical Officers and Civilian Physicians

I. INTERNSHIPS, ASSISTANT RESIDENCIES AND RESIDENCIES in the Allied Hospitals.
II. EXTERN AND FELLOWSHIP INSTRUCTION in clinical departments, including residency experience.
III. GRADUATE INSTRUCTION in basic sciences.
IV. ADVANCED OR GRADUATE COURSES in specialties.
V. NEW METHODS OF DIAGNOSIS AND THERAPY in the Specialties.
VI. CONTINUATION COURSES for general practitioners.

Tuition for former Medical Officers eligible under Public Law 364 (GI Bill of Rights) for educational benefits will be paid by the United States Government.

For circulars and information address:

Franklin E. Walton, M.D.
Assistant Dean

WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

Euclid and Kingshighway
SAINT LOUIS 10, MISSOURI

COOPER CREME

The Original Spermicidal Creme

No Finer Name in Contraceptives. .

ACCEPTED AMERICAN MEDICAL ASSN.

Active ingredients:
Trioxymethylene 0.04% Sodium Oleate 0.67%

Prescribed For Over A Decade

WHITTAKER LABORATORIES. INC.
PEEKSKILL. NEW YORK

Some people call this man "fussy"



THE CHEMIST in this picture is testing a lot of thiamin chloride through the medium of a fluorophotometer. This delicate, complex instrument will tell him, within very narrow limits, the potency of the material at hand. Accurate routine tests on drugs and chemicals are part of the daily job at the Lilly Laboratories. All incoming crude materials, as well as finished products, are subjected to the closest scrutiny. Chemical, pharmacologic, and microscopic tests which must be passed lie in the path of every Lilly Product. No detail, however trifling it may seem, is overlooked. To some this procedure would seem "fussy," but that is one of the reasons why you can be certain that standard products bearing the Lilly Label are the finest obtainable. Specify "Lilly" through your favorite prescription pharmacy.

ELI LILLY AND COMPANY · INDIANAPOLIS 6, INDIANA, U. S. A.

taking nothing for granted

Careful surgeons minimize the chance of postoperative infection by preparing the previously scrubbed skin with Tincture 'Merthiolate' (Sodium Ethyl Mercuri Thiosalicylate, Lilly). In addition to prompt germicidal activity, 'Merthiolate' has a sustained effect, is bacteriostatic in high dilution. With its low toxicity and its compatibility with body fluids, 'Merthiolate' fulfills the need for a reliable skin disinfectant. Useful forms of 'Merthiolate' include, in addition to the tincture, the stainless, nonirritating solution, the ointment, the jelly, and the suppository.

ELI LILLY AND COMPANY

INDIANAPOLIS 6, INDIANA, U. S. A.





12X15 REPRODUCTION OF THIS ANDREW LOOMIS PAINTING SUITABLE FOR FRAMING IS AVAILABLE UPON REQUEST

The will to serve

THE PHYSICIAN'S FIELD of usefulness is not restricted by the financial limitations or social position of his patient. He subscribes to the doctrine that prince and pauper are equal when illness comes, that his professional services are to be provided whenever needed, without reservation or restraint. When hospital and other facilities conducive to the best medical care are not available, the physician accepts the situation as a matter of circumstance and does the best he can. The welfare of the patient comes first, his own convenience next.

For almost seventy years Eli Lilly and Company has been governed by much the same principle. Inspired by the spirit of the Good Samaritan which gave it birth, it has sought, first of all, to make sound contribution to medical practice by providing therapeutic agents of quality unexcelled, and by fostering research which seeks unrelentlessly to develop new and better methods for the prevention and control of disease.



A picture of The Good Samaritan provided the inspiration that eventually led to the founding of Eli Lilly and Company

The Illinois Medical Journal

March, 1946

VOL. 89, NO. 3

Official Journal of the Illinois State Medical Society

EDITOR — Harold M. Camp. EDITORIAL BOARD — James H. Hutton, Chairman, Frederick H. Falls, Josiah J. Moore, Edwin M. Miller, Chauncey C. Maher, Harry S. Gradle, Harry Culver, Walter Stevenson, Raymond W. McNealy.

Editorials

CONSTRUCTIVE PROGRAM OF THE AMERICAN MEDICAL ASSOCIATION FOR THE IMPROVEMENT OF MEDICAL CARE

In June 1945 the Board of Trustees of the American Medical Association and the Council on Medical Service and Public Relations announced a 14 point program to improve the health and medical care situation in the United States. In October 1945 the interpretation of these 14 points and methods of implementation were adopted by the Council on Medical Service. In December 1945 the House of Delegates approved the entire program, and suggested that it be re-arranged, and directed the Board of Trustees to keep the program constantly up to date so that it will stay at least even with, or if possible, a step ahead of the needs of the public.

With this in mind the Board of Trustees has adopted a restatement recently of the 14 point program which clarifies further the position of the American Medical Association on some of these points, and brings into the program more definitely, such present day considerations as maternal and child welfare, medical research, the medical care of the veteran, and the part to be played by the voluntary health agencies.

This restatement is as follows:

NATIONAL HEALTH PROGRAM OF THE AMERICAN MEDICAL ASSOCIATION

1. The American Medical Association urges a minimum standard of nutrition, housing, clothing and recreation as fundamental to good health and as an objective to be achieved in any suitable health program. The responsibility for attainment of this standard should be placed as possible on the individual, but the application of community effort, compatible with the maintenance of free enterprise, should be encouraged with governmental aid where needed.

2. The provision of preventive medical services through professionally competent health departments with sufficient staff and equipment to meet community needs is recognized as essential in a health program. The principle of federal aid through provision of funds or personnel is recognized with the understanding that local areas shall control their own agencies as has been established in the field of education. Health departments should not assume the care of the sick as a function since administration of medical care under such auspices tends to a deterioration in the quality of the service rendered. Medical care to those unable to provide for themselves is best administered by local and private agencies with the aid of public funds when needed. This program for national health should include the administration of medical care including hospitalization to all those needing it but unable to pay, such medical care to be provided preferably by a physician of the patient's choice with funds provided by local agencies with the assistance of federal funds when necessary.

3. The procedures established by modern med-

icine for advice to the prospective mother and for adequate care in childbirth should be made available to all at a price that they can afford to pay. When local funds are lacking for the care of those unable to pay, federal aid should be supplied with the funds administered through local or state agencies.

4. The child should have throughout infancy proper attention including scientific nutrition, immunization against preventable disease and other services included in infant welfare. Such services are best supplied by personal contact between the mother and the individual physician but may be provided through child care and infant welfare stations administered under local auspices with support by tax funds whenever the need can be shown.

5. The provision of health and diagnostic centers and hospitals necessary to community needs is an essential of good medical care. Such facilities are preferably supplied by local agencies, including the community, church and trade agencies which have been responsible for the fine development of facilities for medical care in most American communities up to this time. Where such facilities are unavailable and cannot be supplied through local or state agencies, the federal government may aid, preferably under a plan which requires that the need be shown and that the community prove its ability to maintain such institutions once they are established. (Hill-Burton bill)

6. A program for medical care within the American system of individual initiative and freedom of enterprise includes the establishment of voluntary nonprofit prepayment plans for the costs of hospitalization (such as the Blue Cross plans) and voluntary non-profit prepayment plans for medical care (such as those developed by many state and county medical societies). The principles of such insurance contracts should be acceptable to the Council on Medical Service of the American Medical Association and to the authoritative bodies of state medical associations. The evolution of voluntary prepayment insurance against the costs of sickness admits also the

ILLINOIS STATE MEDICAL SOCIETY

GENERAL OFFICERS, 1944-1945

PRESIDENT ..... EVERETT P. COLEMAN, Canton
PRESIDENT-ELECT ..... ROBERT S. BERGHOFF, Chicago
1ST VICE-PRESIDENT .... HARRY M. HEDGE, Chicago
2ND VICE-PRESIDENT .... WALTER C. BLAINE, Tuscola
SECRETARY-TREASURE .. HAROLD M. CAMP, Monmouth

THE COUNCIL

L. J. Hughes	1st	District, Elgin	1944
E. C. Cook	2nd	District, Mendota	1944
Oscar Hawkinson	3rd	District, Chicago	1946
Percy E. Hopkins	3rd	District, Chicago	1944
E. W. Mueller	3rd	District, Chicago	1945
Chas. P. Blair	4th	District, Monmouth	1946
Ralph P. Peairs	5th	District, Normal	1946
Walter Stevenson	6th	District, Quincy	1945
I. H. Neece	7th	District, Decatur	1946
C. E. Wilkinson	8th	District, Danville	1946
Andy Hall	9th	District, Mt. Vernon	1945
G. C. Otrich	10th	District, Belleville	1945
Ed. S. Hamilton	11th	District, Kankakee	1944
Edward H. Weld	At	Large, Rockford	1946
Chas. H. Phifer	At	Large, Chicago	1945

Chairman of the Council.....Percy E. Hopkins

ILLINOIS MEDICAL JOURNAL

Harold M. Camp, Monmouth.....Editor
L. E. Malley, Chicago....Managing Editor & Business Mgr.

GENERAL COUNSEL

Edward W. Rawlins.....77 West Washington St., Chicago

LEGISLATIVE COMMITTEE

James H. Hutton, Chairman....30 N. Michigan Ave., Chicago

EDUCATION COMMITTEE

R. R. Ferguson, Chairman..4013 N. Milwaukee Ave., Chicago
Miss Jean McArthur, Secretary.30 N. Michigan Ave., Chicago

PERMANENT COMMITTEE ON ARCHIVES

D. D. Monroe, Chairman.....Alton
C. E. Black.....Jacksonville
P. J. McDermott.....Kewanee

SCIENTIFIC SERVICE COMMITTEE

Robert S. Berghoff, Chairman..30 N. Michigan Ave., Chicago
Harold M. Camp, Secretary.....Monmouth

JOURNAL COMMITTEE

Percy E. Hopkins, Chairman.....800 W. 78th St., Chicago
Harry J. Stewart, Secretary.....715 Lake St., Oak Park

Outside of editorial or allied views or statements that are the authoritative actions of the Illinois State Medical Society, the organization denies responsibility for opinions and statements published in the ILLINOIS MEDICAL JOURNAL. Views expressed by the various authors and views set forth in various departments in the JOURNAL represent the views of the writers.

State Society will pay no bills for legal services except those contracted by the Committee. Notify the Chairman at once. Do not employ attorneys.

Send advertising copy, cuts and all communications relating to advertising to ILLINOIS MEDICAL JOURNAL, 30 N. Michigan Avenue, Chicago.

Original articles and membership correspondence to Dr. Harold M. Camp, Monmouth, Ill.

Society proceedings and news items and changes in the mailing list to Managing Editor, 30 N. Michigan Ave., Chicago 2, Illinois.

Subscription price of this JOURNAL to persons not members of the Illinois State Medical Society is $3.00 per year, in advance, postage prepaid, for the United States, Cuba, Porto Rico, Philippine Islands, Hawaiian Islands and Mexico. $4.00 per year for all foreign countries included in the postal union. Canada, $3.50. Single current copies, 50 cents.

utilization of private sickness insurance plans which comply with state regulatory statutes and meet the standards of the Council on Medical Service of the American Medical Association.

7. A program for national health should include the administration of medical care, including hospitalization, to all veterans, such medical care to be provided preferably by a physician of the veteran's choice with payment by the Veterans Administration through a plan mutually agreed on between the state medical association and the Veterans Administration.

8. Research for the advancement of medical science is fundamental in any national health program. The inclusion of medical research in a National Science Foundation, such as proposed in pending federal legislation, is endorsed.

9. The services rendered by volunteer philanthropic health agencies such as the American Cancer Society, the National Tuberculosis Association, the National Foundation for Infantile Paralysis, Inc., and by philanthropic agencies such as the Commonwealth Fund and the Rockefeller Foundation, and similar bodies have been of vast benefit to the American people and are a natural outgrowth of the system of free enterprise and democracy that prevail in the United States. Their participation in a national health program should be encouraged and the growth of such agencies when properly administered should be commended.

10. Fundamental to the promotion of the public health and alleviation of illness are widespread education in the field of health and the widest possible dissemination of information regarding the prevention of disease and its treatment by authoritative agencies. Health education should be considered a necessary function of all departments of public health, medical associations and school authorities.

It is quite important that every member of the Illinois State Medical Society as well as all physicians outside the membership who are interested in maintaining the practice of medicine as a private enterprise, should become thoroughly familiar with these policies and their proper interpretation and use this information in discussing the problems before many groups, with friends in various walks of life, and with their legislators. All should know what is proposed by medicine itself to aid materially in solving some of the alleged inadequacies of medical care as they are so frequently said to exist today.

As has been previously stated in this Journal, we will have within a very short time, a voluntary prepayment plan for providing medical and surgical care for the people of Illinois, policies to be issued by a reputable insurance company which is willing to insure groups for a low premium. For a male, $1.00 per month; for a female, $1.50 per month; for a child $1.00 per month; and for the entire family regardless of the number of children up to the age of 18, $3.25 per month. This rate compares favorably with those charged for similar protection under the many medical service plans now in operation in various states.

Physicians can do a great service to their patients and friends by telling of this policy and the protection it affords, giving the opportunity for those, especially those in lower income groups, to budget the cost of unexpected and frequently prolonged illness or accidents. This, coupled with the low cost hospitalization insurance will free them from additional worries when they need medical or surgical care unexpectedly.

Elsewhere in this Journal appears an interesting article on the development of a nationwide voluntary prepayment medical and surgical plan which is to be placed in operation in the several states within the near future, and with which we hope each of our readers will become familiar. This proposed plan will not interfere with plans already in operation. To the contrary it will aid materially in increasing the number of people protected against the costs of illness and accidents everywhere.

HARRISON H. SHOULDERS, M.D.; PRESIDENT-ELECT OF THE A.M.A.

At the recent meeting of the House of Delegates of the American Medical Association, Dr. Harrison H. Shoulders of Nashville, was elected to the office of President-elect of that Association, at the insistence of many of his friends in the House. Dr. Shoulders has served American Medicine faithfully and sincerely over a period of years, having been freely publicized some years ago for developing the so-called "Shoulders Plan" for caring for disabled veter-

ans at their homes by the physician of their choice.

For a period of 18 years Dr. Shoulders was secretary of the Tennessee State Medical Association and during this same period was Editor of its Journal. He was a member of the A.M.A. House of Delegates for a number of years attending all meetings for the past twenty years. In 1935 he was elected vice-speaker of the House of Delegates then in 1938 elected as speaker which position he retained until his resignation during the 1945 session.

Having had special training in surgery over a period of years, he has been an outstanding surgeon of his native city and was certified as a member of the Founders Group by the American Board of Surgery. For several years he has been assistant professor of clinical surgery at Vanderbilt University Medical School at which institution he has become a popular instructor.

Dr. Shoulders has many friends in Illinois many of whom will recall his appearance by invitation at an annual meeting held in Springfield nearly 25 years ago when he spoke on the "Shoulders Plan" which was unanimously approved by the House of Delegates at that meeting. As Speaker of the House of Delegates of the A.M.A. Dr. Shoulders has carried on his duties efficiently and most satisfactorily, and invariably with but little loss of time, for being an unusual type of diplomat, no one has taken offense when he was ruled out of order by a man who was invariably giving the proper interpretation to the rules.

The Illinois State Medical Society will be pleased, indeed, to have the new President-elect visit the Society during the 1946 annual meeting, and again as President at the meeting in 1947, and he will find the welcome sign out at any time he is able to drop in on us.

AMERICAN MEDICAL ASSOCIATION VOLUNTARY PREPAYMENT SICKNESS PLAN

At the meeting of the A.M.A. House of Delegates held in Chicago the first week in December, 1945, the Council on Medical Service and Public Relations was directed to set up a nation wide plan for a voluntary prepayment medical care plan which when approved by the Board of Trustees, should be placed in operation as soon as possible. The A.M.A. has first set up standards of acceptance for medical care plans which have the approval of the Council on Medical Service and Public Relations. Any plans meeting these standards will carry the seal of acceptance of the American Medical Association, and will be entitled to display this seal of acceptance on the policies and on all announcements which are used in selling the policies, and in all advertisements throughout the individual states.

In order to qualify for acceptance the prepayment plan must have the approval of the state or county medical society in the area in which it operates. The medical profession in that area must assume responsibility for the medical services included in the benefits. Plans must provide free choice of physicians who are doctors of medicine and maintain the personal, confidential relationship between patient and physician. The plan must be operated to provide the greatest possible benefits in medical care to the subscriber. Medical care plans may be of either cash indemnity or service units with the understanding that benefits paid in cash are to be used to assist in paying the costs incurred for medical service.

The standards also include provisions relative to the actuarial data that are required, systems of accounting, supervision by appropriate state authorities and periodic checking and reporting of the progress of the plan to the Council.

Coincidentally with the announcement of these standards of acceptance, there was organized, as a voluntary federation, an organization known as Associated Medical Care Plans, Inc. This independent association will include as members all plans that meet the minimum standard of the Council on Medical Service of the American Medical Association. The Associated Medical Care Plans will undertake to establish coordination and reciprocity among all of these plans so as to permit transference of subscribers from one plan to another and use of the benefits in any state in which a subscriber happens to be located. Under this method great industrial organizations with plants in various portions of the United States will be able to secure coverage for all of their employees. Moreover, it will be possible for the Veterans Administration, welfare and industrial groups as well as government agencies,

to provide coverage for the people in any given area through a system of national enrollment. In addition, the Associated Medical Care Plans, Inc., will undertake research and the compilation of statistics on medical care, provide consultation and information services based on the records of existing plans and engage in a great campaign of public education as to the medical service plan movement under the auspices of state and county medical societies.

The Board of Trustees of the American Medical Association also announced the establishment under its Council on Medical Service of a Division of Prepayment Medical Care Plans with a director and a staff who will administer the activities of the Council on Medical Service related to the promotion and development of medical care plans in all of the states.

In announcing its proposals for a nation-wide provision of sickness insurance on a mutual nonprofit basis, the Association through its President and the Board of Trustees, authorizes the publication of its complete health program with ten points which include the development of services in the field of preventive medicine, maternal and child health, voluntary prepayment plans for protection against the costs of sickness, compensation for loss of wages due to illness, the care of the veteran and the development of a high standard of housing, nutrition, clothing and recreation.

The statement so frequently made by those desiring to develop a compulsory health insurance system for all the people, is that the medical profession invariably objects to their recommendations, yet does nothing constructive to develop a substitute plan. Consequently with this proposed nation-wide plan, there is an excellent opportunity to show a constructive effort within the profession to give the people of this country something which is in keeping with the true democratic spirit.

Too many people in the past who could have had adequate medical care at a time when it could have been of the most benefit, have not chosen to procure it until too late for complete recovery. Likewise even under a compulsory insurance plan for providing medical care there are many people who would not go to the doctor or consult him until they were completely disabled. It seems quite logical to believe that when medical and/or surgical care is provided on a voluntary prepayment basis that many within these groups will desire to consult their own family physician early because the physicians will be 100% back of the movement and will tell all patients of the necessity of procuring advice and other care at the first warnings of approaching illness. When voluntary prepayment medical care plans are in operation in all of the states, there will be but little excuse for anyone to be unprepared against the hazards of illness or accident.

MOBILE X-RAY UNITS

A new era in the fight against tuberculosis was launched recently when the State of Illinois received and formally dedicated the first of its four new "x-ray rooms on wheels", which will make it possible to blanket the state for mass case-finding surveys.

This service is a part of the tuberculosis control program of the State Department of Public Health and is offered to the people of the State free of charge.

Active tuberculosis may exist within the individual without giving rise to any symptoms. Frequently the individual does not become aware of his infection until this infection has reached a stage in which medical care is less effective. Those who discover their infection in the very early or minimal stage of the disease can often be cured by the early application of proper medical care. Early case-findings then accomplishes two objectives. (1) It offers the infected individual the best chances of cure and (2) it prevents the spread of that individual's infection to home contacts and other associates. X-ray is the most efficient means of finding tuberculosis in its early stages especially when this technic is applied to large groups of individuals.

The equipment consists of General Electric 4x5 units with stereo 4x10 attachment and gasoline driven generators. Each unit contains a compact but fully equipped x-ray laboratory mounted on a 1½ ton truck for the development of the x-ray films. The trailer generator is capable of producing the necessary electrical power for the operation of the unit.

X-rays of the chest may be taken without having patients disrobe. It is merely necessary that heavy outer garments be removed and metal ob-

jects be removed from the chest area. Seven individuals may be scheduled for x-ray in a ten minute period. The daily capacity is about 200-300 x-rays.

With the approval of Governor Dwight H. Green an invitation was extended by Dr. Roland R. Cross, Director, Illinois Department of Public Health, to all Departments, Boards and Commissions for the participation of their various Springfield employees. A representative from each governmental unit attended a meeting held by the Department to discuss the details of the proposed survey. Materials in the form of a series of posters and individual leaflets were prepared by the Department for use by the various governmental units in interpreting the value of the program.

At a special ceremony on January 10 Governor Dwight H. Green was the subject of the first x-ray in the mobile x-ray unit. Preceding this the Governor made a few remarks over a radio hook-up of the value of the x-ray service and concluded: "We can be sure that the Department of Public Health already stimulated by the prospects afforded in the appropriation for sanatoriums, will regard the addition of these mobile x-ray units as an important trust in the fulfillment of another of its long term objectives — that of making Illinois the national leader in the fight against tuberculosis."

The survey was offered to State employees on a voluntary basis. Approximately 3 out of 4 employees took advantage of the opportunity. The x-ray films were read by a physician from the Department of Public Health and a confidential report was mailed to the individual's place of residence. When an individual's x-ray showed evidence of tuberculosis or some other physical abnormality was discovered, the person was invited to a confidential interview with a physician of the Department of Public Health. No attempt was made to derive a definite diagnosis on the basis of one or two x-ray films. If further medical observation was indicated, the findings of the Department of Public Health were referred to a private physician or local sanatorium board upon the written consent of the individual.

Requests for inclusion of families of State employees were so numerous that it was possible to retain the mobile x-ray unit at the east entrance of the Capitol for an extended period of time for this purpose.

Detailed suggestions to groups interested in having the services of one of the units for their local area will be available through full-time city, county and district health departments.

RADIO PROGRAMS

The Educational Committee. Illinois State Medical Society suggests that you "listen in" to the following radio programs:

Monday afternoons — 2:00 o'clock — Station WTAD, Quincy — Series of programs on "Dodging Contagious Diseases" — sponsored by the Adams County Medical Society

Tuesday evenings — (see hour in your newspaper) — American Broadcasting Co. — "The Doctors Talk It Over"

Thursday afternoons — 4:15 to 4:30 o'clock — Station WILL, — "Mental Hygiene" — sponsored by the Champaign County Medical Society

Saturday afternoons — 3:00 o'clock — NBC — "Doctors At Home" — sponsored by the American Medical Association.

★

A TIP: Reserve rooms now for the Annual Meeting in Chicago, May 14, 15, 16

Correspondence

U. S. PUBLIC HEALTH SERVICE NEEDS PHYSICIANS

Appointments to fill vacancies in the Reserve Corps of the United States Public Health Service are now being made, and examinations for Regular Corps appointments will be held in April and May, Surgeon General Thomas Parran has announced.

Physicians, dentists, and nurses are needed immediately for duty in hospitals, in the Tuberculosis and Venereal Disease Control programs, and in other activities of the Public Health Service.

Pay and allowances, established by law, are identical with those for medical officers of the Army. All travel expenses, including travel to first station, are paid by the Service.

In announcing the recruitment campaign, Dr. Parran stated: "For the physician, the dentist, and the nurse, the Public Health Service is unique in the variety of opportunities it offers. Not only does the person have the opportunity for outstanding service to the nation in the growing field of Public Health, but the opportunities for professional growth and development are almost limitless. There is clinical work in Public Health Service hospitals throughout the country. The importance of medical research is being emphasized today more and more and in the Public Health Service, research opportunities exist in both laboratory and the field. Institutional, public health, and administrative work is offered nurses. Whether a professional person is embarking on his career, or has already elected the field in which he wishes to specialize, the Public Health Service, I sincerely believe, offers him much that he is seeking."

Appointments to the Reserve Corps are made on a basis of review of data furnished by the applicant. Physical examination is required.

Regular Corps appointments require appearance before a Board, and a written professional examination. Dates and places for the examination will be announced shortly.

The Service pointed out that a person receiving an appointment in the Reserve Corps immediately, may, if he desires, take the examination for the Regular Corps at the time they are held.

Those interested in either immediate appointment in the Reserve Corps, or in taking the examination for the Regular Corps, should request application forms of the Surgeon General, U. S. Public Health Service, Washington, D. C., Federal Security Agency.

TO THE MEMBERS OF THE AMERICAN ASSOCIATION FOR THE STUDY OF GOITER:

The date and place for our annual meeting has been decided upon. It will be at the Drake Hotel, Chicago, Illinois, on June 20th, 21st, and 22nd. This date will make it convenient for those who wish to attend the meeting of the American Medical Association in San Francisco, California, on July first. Your officers have arranged for the meeting to be held in a centrally located city, easily accessible to all, and at a time convenient, we hope, for all. A full attendance is desired. *Please make your hotel reservations early*, as they are limited.

We have not had a meeting since 1941, due to the war and to so many of our members serving in the armed forces; also to the lack of transportation and hotel accommodations. Now

that the war is over, we are attempting to make our first meeting a really outstanding success to compensate for our long inactivity.

The Program Committee requests that each of you who desires to read a paper, *send the title at once to the Chairman,* Dr. S. F. Haines, Mayo Clinic, Rochester, Minnesota, in order that our programs may be printed and distributed promptly. This committee is planning a full and interesting program with special features, such as a paper on radioactive isotopes in relation to the investigation and treatment of thyroid disease. There will be papers discussing the use and danger of Thiouracil in toxic goiter and on many other phases of thyroid disease.

Our Van Meter Prize Award has caused quite an interest both at home and abroad.

The officers wish to call your attention to our "Constitution and By-Laws" article II, Section 3, Senior Members: "A member who has been an active member for fifteen years or has reached the age of sixty, may upon his request and by action of the Council be placed on the Senior list. Senior members have all the rights of active membership without paying dues". Perhaps there may be some who may desire to be placed on the Senior List, thereby making room for more younger men who are eager for membership. Our active membership is limited to one hundred and fifty. Any correspondence relating to new members should be directed to the Recording Secretary, Dr. George C. Shivers, Colorado Springs, Colorado.

Please do not lay this aside, but send in titles of papers at once to Dr. Haines; write immediately to the Drake Hotel, Chicago, and make your reservation for June 20th, 21st and 22nd.

Yours sincerely,

T. C. Davison, M.D.

PRECEPTORSHIPS

In regard to the substitution of a preceptorship for residency in an ophthalmic hospital, the American Board of Ophthalmology has always accepted such training in favorable cases. During the present over-crowding of facilities, the Board expects to take a liberal attitude regarding the requirements for training.

It should, however, be pointed out that neither a residency nor a preceptorship suffices in itself to meet the requirements of the Board. Each case will still be judged on its merits in determining fitness for examination.

In entering upon preceptorship certain conditions should be kept in mind. First the student will profit most after a sound course in the basic sciences of physiology of the eye and of vision, optics, pathology, bacteriology, chemistry, pharmacology, the relation of the eye to general disease, anatomy, embryology and neurology.

This is essential for a residency, more so for a preceptorship. While men have been accepted from preceptors not diplomates of the Board, it is obvious that the Board has more information about those teachers who have passed its examinations.

Any preceptor should understand that he is assuming a responsibility in taking a student and is not merely obtaining help in the drudgery of his office. He should be willing to give time to clinical training and the use of apparatus, slit-lamp, ophthalmoscope, tonometer and to directing the student's practice in surgery on animal eyes, assisting in operations and ultimately in the performance of them.

To cover the same amount of ground will take much longer in a preceptorship than in a residency and students should accept opportunities to take hospital positions of all sorts as they become available.

S. Judd Beach, M.D., Secretary

UNITED NATIONS RELIEF AND REHABILITATION ADMINISTRATION

1344 Connecticut Avenue
Washington 25, D. C.

Dear Dr. Camp:

May I call your attention to the medical recruitment program of the United Nations Relief and Rehabilitation Administration for China. This program is now well under way. Certain brackets, however, remain open, and it occurs to me that it might be mutually beneficial were you to have these positions in mind.

At present, we have opportunities for Nutrition Officers, Public Health Engineers, Consultants in Tuberculosis, Typhus, Malaria, and Maternal and Child Health, Sanitary Engineers, General Surgeons, Orthopedic Surgeons, Genito-Urinary Surgeons, and an Obstetrician-Gynecologist.

These categories for physicians call for clinical

work, for the most part in connection with universities in the China Field. The work is interesting, the compensation better than adequate, and the underlying idealism is obvious.

Would you be so kind as to keep this matter in mind in relation to physicians separating from the military, and will you feel free to call upon me for any more detailed information you might require?

Sincerely yours,
Goodrich C. Schauffler, M.D.
Field Operations Officer
Health Division

UROLOGY AWARD

The American Urological Association offers an annual award "not to exceed $500" for an essay (or essays) on the result of some specific clinical or laboratory research in Urology. The amount of the prize is based on the merits of the work presented, and if the Committee on Scientific Research deem none of the offerings worthy, no award will be made. Competitors shall be limited to residents in urology in recognized hospitals and to urologists who have been in such specific practice for not more than five years. All interested should write the Secretary, for full particulars.

The selected essay (or essays) will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Netherland Plaza, Cincinnati, Ohio. July 22-25, 1946.

Essays must be in the hands of the Secretary, Dr. Thomas D. Moore, 899 Madison Avenue, Memphis, Tennessee, on or before July 1, 1946.

NATIONAL GASTROENTEROLOGICAL ASSOCIATION 1946 AWARD CONTEST

The National Gastroenterological Association announces the establishment of an Annual Cash Prize Award of $100 and a Certificate of Merit for the best unpublished contribution on Gastroenterology or allied subjects. Certificates will also be awarded those physicians whose contributions are deemed worthy.

Contestants residing in the United States must be members of the American Medical Association. Those residing in foreign countries must be members of a similar organization in their own country. The winning contribution will be selected by a board of impartial judges and the award is to be made at the Annual Convention Banquet of the National Gastroenterological Association to be held at the Hotel Pennsylvania in New York City on Thursday evening, June 20, 1946.

Certificates awarded to other physicians will be mailed to them. The decision of the judges will be final. The Association reserves the exclusive right of first publishing the winning contribution, and those receiving certificates of merit, in its Official Publication, THE REVIEW OF GASTROENTEROLOGY. All entries for the 1946 prize should be limited to 5,000 words, be typewritten in English, prepared in manuscript form, submitted in five copies, accompanied by an entry letter, and must be received not later than May 1, 1946. Entries should be addressed to the National Gastroenterological Association, 1819 Broadway, New York 23, N. Y.

DIETICIANS TO MEET

The 28th Annual Meeting of the American Dietetic Association will be held at the Netherland Plaza, Cincinnati, Ohio, October 14th through 18th, 1946.

COURSE IN PEDIATRICS

Michael Reese Hospital Post-Graduate School with the cooperation of the members of the Department of Pediatrics, University of Chicago and Loyola University School of Medicine, offer a course in Pediatrics. The course to be held at Michael Reese Hospital from May 1st-May 29th, 1946. Full time. Tuition $100.00. Write to Dr. Samuel Soskin, Dean, Michael Reese Hospital Post-Graduate School. Twenty-ninth Street and Ellis Avenue, Chicago 16, Illinois.

CANCER COMMITTEES MERGE

Merger of the Chicago Cancer Committee with the Illinois Division of the American Cancer Society is announced by Dr. John A. Wolfer, chairman of the Illinois executive committee. The cancer information bureau established by the Chicago Cancer Committee at 139 North Clark Street will be continued under the auspices of the American Cancer Society.

State Department of Public Health

FACILITIES FOR THE RAPID TREATMENT OF SYPHILIS

The development of rapid forms of therapy for syphilis has aided materially the control of venereal disease by quickly rendering acute cases of syphilis non-infectious and shortening the time of treatment. Although many forms of rapid treatment have been developed since 1937, the one now commonly used combines the therapeutic effects of penicillin, arsenicals and heavy metals administered to the patient under hospital management. The "5-12-3" plan, incorporating 5 injections of an arsenical, 1,200,000 units of penicillin divided into multiple doses and 3 injections of bismuth subsalicylate, all administered over a period of from 5 to 9 days, is now known to cure, as well as can be determined, 80 to 90 per cent of patients with early syphilis. This figure is based on prolonged, continuous observation of patients receiving this type of treatment in selected areas throughout the country where good follow-up procedures are maintained. Such results achieved within the short period of from 5 to 9 days are clearly superior to the old routine of clinic management in which 75 per cent of patients with early syphilis lessened their chances of cure by failing to return for adequate treatment.

Taking advantage of the excellent results achieved in nationwide research centers, the Illinois Department of Public Health, with the advice and approval of the Venereal Disease Committee and the Council of the Illinois State Medical Society, devised a plan of establishing rapid treatment facilities in *local hospitals* throughout the State. To date, nineteen such centers have been set up for the care of patients with primary and secondary syphilis who are indigent or who are referred by private physicians or clinics. Admission of patients to such facilities depends on the confirmation of the suspected diagnosis by darkfield examinations performed in designated laboratories, or in the event darkfield tests are negative, by a series of blood tests in conjunction with clinical findings and appropriate medical history. Treatment is supervised by part-time clinicians recommended by county medical societies.

In certain counties of the State, excluding areas within a 50 mile radius of Chicago and St. Louis, arrangements have been made with county medical societies whereby the Department will pay $10.00 to any physician who refers a case of primary or secondary syphilis to a local rapid treatment facility. This fee will be paid if the diagnosis is confirmed and if the patient agrees to accept rapid treatment. In this way the physician is reimbursed for his time spent in making the initial examination and referring the case to public health agencies. It should be emphasized that the referral fee project is limited to counties in which the medical societies approve the plan. A list of such counties appears at the end of this article.

The procedure enabling physicians to utilize these facilities is as follows:

1. If examination of the patient reveals findings suggestive of primary or secondary syphilis, the physician should contact the State's District Health Officer, the county health officer or the full-time city health officer.

2. A representative of the health department will refer the patient to the proper diagnostic

facilities where the diagnosis may be confirmed by appropriate tests.

3. If the diagnosis of primary or secondary syphilis is confirmed, the patient will be hospitalized in a local hospital participating in the plan and will receive the "5-12-3" routine treatment over a 5 day period.

4. If the diagnosis is not confirmed, or if the patient elects to return to the physician for treatment, no referral fee will be paid.

5. If, however, the diagnosis is not confirmed by darkfield examination but the patient is again referred because of subsequent positive blood tests during the ensuing 8 weeks, the case will be admitted for rapid treatment and the fee paid to the referring physician.

6. Upon completion of treatment at the hospital, the patient will be asked to return to his original physician or to the referring clinic for the necessary post-treatment observations and quantitative blood tests. Follow-up should continue for at least one year.

7. Health departments will assume the responsibility for reports and for obtaining information concerning contacts.

At the present time, rapid treatment facilities have been established in the following hospitals:

Champaign County Hospital, Champaign, Ill.
Burnham Hospital, Champaign, Ill.
Mennonite Hospital, Bloomington
Winnebago County Hospital, Rockford
St. Anthony's Hospital, Rockford
Decatur-Macon County Hospital, Decatur
St. Mary's Hospital, Cairo
Galesburg Cottage Hospital, Galesburg
Blessing Hospital, Quincy
St. Mary's Hospital, Quincy
St. Francis Hospital, Peoria
Graham Hospital, Canton
St. Mary's Hospital, LaSalle
Herrin Hospital, Herrin
Salem Memorial Hospital, Salem
Memorial Methodist Hospital, Mattoon
St. John's Hospital, Springfield
Lake View Hospital, Danville
St. Mary's Hospital, Kankakee

Counties in which referral fees project is accepted by Medical Society:

Champaign	Adams	Marion
Winnebago	Peoria	Williamson
Macon	Fulton	Coles
Knox	LaSalle	Vermilion

BLOOD PLASMA

During the war, the American people gave, through the American Red Cross, large quantities of blood from which dried plasma was prepared for the Armed Forces. The supply of this material was predicated on the needs of the Army and Navy for a long and costly war. Because of an earlier cessation of hostilities than was reasonably to be expected in both the European and Pacific theatres, there is now on hand a quantity of dried plasma which is in excess of the needs of the Army and Navy during the anticipated useful life of the plasma, namely, five years from the date of processing. According to Army and Navy estimates, the available surplus amounts to approximately one and a quarter million packages at the present time.

On October 3, 1944, the Federal law was approved which provided that "no surplus property which was processed, produced or donated by the American Red Cross for any government agency shall be disposed of except after notice to and consultation with the American Red Cross. All or any portion of such property may be donated to the American Red Cross, upon its request, solely for charitable purposes." Under this provision of Congress, a formal request was made to the Army and the Navy that all surplus plasma be transferred to the American Red Cross. This action was taken on the ground that the American Red Cross has a responsibility to the American people to assure that plasma and other derivatives of the blood voluntarily contributed for the members of the Armed Forces be utilized to the best advantage and not be wasted or offered for sale or barter. In making this request, it was proposed that any surplus should be returned to the American people, who had made these supplies of plasma possible, for use in veterans' hospitals and in civilian medical practice. This proposal was accepted by the Army and Navy, and, accordingly, they have transferred to the American Red Cross all available surplus stores of plasma and other blood derivatives.

The American Red Cross has estimated, on the basis of the population of the State, weighted by the number of physicians licensed to practice medicine and surgery and by the number of general, pediatric and maternity hospital beds and any other beds devoted to the care of acute

illness, the amount of plasma required by each State for a three months' supply, and has turned the material over to the State Department of Public Health, which will assume the cost and responsibility of distributing the plasma to the physicians and hospitals within the State. A plan has been prepared, which has been approved by the Illinois State Medical Society and the Illinois Hospital Association, under which each hospital will receive soon its initial shipment of plasma. Each physician in the State will also have the opportunity of receiving a unit of plasma to be kept on hand for emergency use, and a supply of plasma will be established in each full-time city, county and district department of health office. Replacements for plasma used may be obtained from the Division of Communicable Diseases in Springfield. It is quite likely that additional amounts of plasma will be declared surplus and it has been estimated that sufficient plasma will be available to supply all civilian needs for at least two years and perhaps longer. No doubt the opportunity of obtaining without cost plasma, which has a commercial value of $18.00 per unit, will stimulate the wider use of the product in the treatment of shock, burns and hemorrhage. After the surplus plasma has been used up, civilians will have to contribute their blood voluntarily, as they did during the war, to make possible the continued use of this material.

THE 1945 RECORD OF VITAL STATISTICS

By the Division of Vital Statistics and Records

The provisional rate of 11.5 deaths occurring in Illinois for each 1,000 persons living in the state reflects a healthy condition during 1945. For 10 years previous to 1945 deaths averaged 11.2 per thousand of population, while during the war years (1942-45) the average was 11.4. This constitutes a remarkable war record when it is remembered that the number of persons in the older age groups has been naturally increasing year by year, while at the same time the absence of military personnel takes away a large number in just those age groups for which the risk of dying in civilian life is rather small.

Total births and the birth rate both receded again for the third successive year from the 1943 high. Nevertheless the 1945 rate of 17.4 live births for each 1,000 population is higher than that for any of the 14 years from 1928 to 1942. The many births in the early 1920's resulted in sharp increases in the numbers of marriageable persons during the 1940's. This, coupled with incentives to marriage and childbearing brought on by war time circumstances, largely accounts for the recent high birth rates.

Maintenance of the current maternal death rate at the all-time low of 1.8 deaths per 1,000 live births is a creditable achievement. It is to be hoped, however, that this does not represent a leveling off of recent successes in lowering the risk of childbearing. It is known that improved medical care made possible by modern therapeutic agents and better techniques has contributed greatly to the reduction in maternal deaths. The wider use of these methods, in which the Emergency Maternal and Infant Care program for the wives of men in the Armed Forces has been helpful, has been made possible in the last several years by better economic conditions. It is not yet possible to statistically determine exactly how, when, where, and why the progress came about.

Again a new all-time low in the infant death rate in Illinois has been reached. During 1945 the loss of babies under 1 year of age was at the rate of 31.8 for each 1,000 live births which took place in the state. The reduction in infant deaths did not occur in the most frequent cause, (premature birth) nor in the age group at greatest risk (under 1 month of age). The neonatal rate for 1945 was 21.8 deaths per 1,000 live births, exactly the same as in 1944. The current reduction is almost entirely accounted for by fewer deaths from respiratory disease and birth injury among infants.

Heart disease continues to be the leading cause of death and in 1945 deaths from this cause increased to 410 per 100,000 population. Cancer continues as the second most frequent cause and its mortality rate of 165 per 100,000 population constitutes an all-time high for the disease. Twenty years ago cancer mortality stood at 99 per 100,000 living persons and has consistently increased *every* year. For both cancer and heart disease the aging of our population is a very important factor in producing these increases when coupled with *reductions* in infant and communicable disease mortality,

DEATHS BY CAUSE: ILLINOIS OCCURRENCES, 1944 AND 1945
1945 STATISTICS BY AGE GROUPS

Cause of Death	1945 (Provisional figures) Total	Neonatal (under 1 month)	Infant (under 1 year)	Under 5 years	5-14 years	15-24 years	25-44 years	45-64 years	65 years and over	Age unknown	1944 (Final figures)
Deaths from all causes	88215	2921	4247	5075	1028	1824	7989	28092	44192	15	87144
Selected cause of death, total	81859	2838	4001	4675	860	1608	7172	26493	41037	14	81056
Diseases of infancy and congenital defects	3154	2655	2991	3064	40	23	15	6	3	3	3307
Maternal causes	244	—	—	—	1	49	191	3	—	—	254
Communicable diseases, total	1299	15	97	158	104	60	241	518	218	—	1457
Chickenpox	8	—	2	6	1	—	1	—	—	—	6
Diphtheria	15	—	—	6	6	—	—	2	1	—	23
Dysentery — all forms ..	28	2	11	13	3	1	2	3	6	—	34
Encephalitis	42	—	—	3	2	2	9	19	7	—	33
Gonococcus infection	5	1	2	2	—	2	1	—	—	—	8
Malaria	8	—	—	—	—	—	2	1	5	—	4
Measles	10	—	2	6	4	—	—	—	—	—	85
Meningitis	134	—	9	31	17	15	35	28	8	—	186
Poliomyelitis	94	—	1	12	47	15	17	1	2	—	34
Rabies	2	—	—	—	2	—	—	—	—	—	2
Scarlet fever	25	—	3	4	6	9	4	2	—	—	28
Syphilis	786	9	17	18	3	9	151	433	172	—	843
Tetanus	15	—	—	—	4	—	3	3	5	—	20
Tularemia	6	1	1	1	—	—	3	2	—	—	10
Typhoid and paratyphoid fever	9	—	—	—	1	3	1	2	2	—	13
Undulant fever	3	—	—	—	—	—	1	2	—	—	4
Whooping cough	53	—	44	48	5	—	—	—	—	—	42
Other communicable diseases*	56	2	3	7	4	4	11	20	10	—	82
Acute respiratory diseases ..	3192	92	529	718	93	95	383	802	1100	1	3269
Influenza	315	2	45	70	15	15	37	52	126	—	521
Pneumonia	2877	90	484	648	78	80	346	750	974	1	2748
Tuberculosis — all forms ..	3091	—	23	56	46	393	1119	1085	392	—	3125
Pulmonary tuberculosis ..	2827	—	7	17	23	350	1040	1026	371	—	2890
Accidents — all forms	4992	15	103	286	309	418	848	1279	1850	2	4900
Motor vehicle	1439	—	4	60	120	198	327	421	313	—	1317
Home	1837	12	92	194	70	46	124	296	1106	1	1767
Occupational	602	—	—	—	1	53	185	281	82	—	668
Public	1114	3	7	32	118	121	212	281	349	1	1148
Cancer	12694	1	6	26	33	72	1028	5610	5923	2	12482
Cerebral hemorrhage	7143	—	5	7	8	17	247	2054	4809	1	6759
Diabetes	2624	1	2	4	16	41	114	1021	1428	—	2605
Diseases of the digestive system	3859	54	228	303	78	100	529	1643	1206	—	4102
Cirrhosis of the liver	889	—	—	2	3	4	112	477	291	—	866
Diarrhea and enteritis	252	44	179	208	2	1	6	4	31	—	270
Goiter	220	—	—	—	—	6	29	106	79	—	221
Heart disease	31518	1	7	21	73	147	1627	10226	19421	3	30680
Coronary	6717	—	3	4	3	9	341	2897	3462	1	6114
Chronic rheumatic	1651	—	—	2	39	77	281	566	686	—	1685
Homicide	346	2	3	8	7	65	160	87	19	—	312
Nephritis	6050	2	5	19	19	77	382	1609	3942	2	6107
Prostatic diseases	547	—	—	1	—	—	—	70	476	—	650
Rheumatic fever	72	—	2	4	30	14	20	4	—	—	71
Suicide	814	—	—	—	3	31	239	370	171	—	755
All other causes	5970	71	229	374	142	192	732	1485	3044	1	6088
Causes as yet unassigned	386	12	17	26	26	24	85	114	111	—	—

*The 1945 figure includes the following deaths from other diseases notifiable in Illinois: Actinomycosis 1, Erysipelas 6, Leprosy 1, Lymphogranuloma 1, Mumps 3, Typhus fever 1, Vincent's angina 3, Weil's disease 7.

VITAL STATISTICS OF ILLINOIS: 1940-1945
Occurrences within the state
(Based on registrations made prior to February 1st of succeeding year)

	1945*		1944		1943		1942		1941		1940	
	Number	Rate**	Number	Rate**	Number	Rate**	Number	Rate**	Number	Rate**	Number	Rate**
Live births	133,751	17.4	138,805	18.2	152,670	20.1	154,075	19.5	134,447	16.9	123,211	15.6
Stillbirths	2,927	0.4	3,049	0.4	3,389	0.4	3,389	0.4	3,197	0.4	3,162	0.4
Deaths—all ages	88,215	11.5	87,144	11.4	90,714	11.9	86,707	11.0	85,552	10.8	88,233	11.2
Death of infants under 1 year	4,247	31.8	4,496	32.4	5,070	33.2	5,075	32.9	4,564	33.9	4,331	35.2
Death from maternal causes	244	1.8	254	1.8	309	2.0	292	1.9	331	2.5	359	2.9
Excess of births over deaths	45,536	5.9	51,661	6.8	61,956	8.2	67,368	8.5	48,895	6.2	34,978	4.4
Estimated civilian population	7,700,000		7,630,000		7,593,255		7,904,164		7,943,608		7,906,514	

*Provisional statistics.
**Live birth, stillbirth, and death rates are calculated per 1,000 estimated population. Infant and maternal death rates are per 1,000 live births.

which exact their toll on the population for the most part before chronic disease can become well established.

Nephritis dropped from third place in 1944 to fourth in 1945 among the leading causes. The drop from 89.3 to 78.6 deaths per 100,000 population for nephritis from 1944 to 1945 may be partly due to more specific certification of death causes on the part of physicians; nevertheless, the lower rate represents an important reduction in actual mortality from this cause. Cerebral hemorrhage rose to almost 93 deaths per 100,000 population in 1945 so as to almost attain the high point of 94.6 reached in 1943.

Accidents continue fifth in numerical importance and the 1945 provisional rate of 64 per 100,000 population is somewhat over the corresponding provisional figure of 61.6 in 1944. Provisional statistics on accidental deaths are always more incomplete than on other causes, because of the chronic lateness with which coroner's certificates of death are filed. The 1944 final figure of 4,900 accident deaths was 200 over the provisional figure and we can similarly expect that final 1945 figures will be in the neighborhood of 5,200 accidental deaths. The advent of increased auto traffic after the lifting of gasoline restrictions has brought back the severe menace of auto accidents. Auto accident fatalities recorded for December, 1945 were almost one-third greater than for December, 1944. There has also been an important increase in fatal accidents in the home, which have accounted for 1837 deaths in 1945 as opposed to 1693 in 1944 at the time provisional statistics were assembled. Decreases in fatality have been recorded both for occupational and public accidents.

Mortality from communicable diseases was generally lower in 1945 than in 1944. Despite the fact that twice as many deaths (639) from acute respiratory diseases were reported for December, 1945 over December, 1944, the annual total is somewhat less for 1945 than for 1944. The months of October and November had very similar mortality in the two years. An interesting fact is that pneumonia deaths have increased much more sharply than influenza deaths. This may be partly accounted for by increased reporting of atypical pneumonias, which would formerly have been reported as influenza. This contributes to the situation where we find pneumonia mortality for 1945 as 37.4, while for 1944 it was 36 deaths per 100,000 population.

The tuberculosis mortality rate declined from 41.0 in 1944 to 40.1 deaths per 100,000 population in 1945. This continues the slow but long downward trend in deaths from tuberculosis, which reflects the cumulative effect of tuberculosis control measures over a long period. Intensified control of the disease should greatly reduce the tuberculosis death rate. Such lowering of mortality as has occurred does not indicate control has been adequate and that we can be complacent about tuberculosis.

The sharp outbreak of poliomyelitis which took place in Rockford and vicinity in 1945 is

reflected in the year's mortality from this cause. There were 94 polio deaths recorded in 1945, almost triple the 1944 figure; the 1945 provisional rate for polio is 1.2 deaths per 100,000 population, somewhat more than twice "normal" incidence.

The vital statistics of 1945 furnish little indication now as to what can be expected in 1946. Projections of experience are at best risky, but the current situation is unusually fraught with complications. The return of military personnel to civilian life has occassioned important and unknown population shifts, crucial housing problems, and a redistribution of employment. Industrial reconversion has brought out many impending changes in economic conditions. The shifting of national life from war to peace activity with its attendant disturbances of existing social and economic conditions cannot fail to have profound effects on our health and welfare problems. If economic prosperity is maintained, a fairly substantial increase in marriages and births can be expected. If housing conditions are sufficiently improved, we can hope to escape the mortality attendant upon inadequate sanitation and overcrowding. The vital statistics of 1946 will begin to throw light on many of these questions.

TWO NUTRITIONAL AGENTS FOUND EFFECTIVE FOR DISEASED LIVER

Degenerative Process Which Often Leads To Death In Cirrhosis Of Liver Is Reversed By Diet Supplement

Two nutritional agents have been found to reverse the degenerative process which leads to death in cirrhosis of the liver, according to A. J. Beams, M.D., of Cleveland, writing in the January 26 issue of *The Journal of the American Medical Association.*

Cirrhosis of the liver is a chronic disease characterized by an excess of fibrous tissue in the liver and more or less deterioration and atrophy of the liver cells. The liver takes on a rough, nodular appearance because it tries to restore itself with new cells.

Dr. Beams, who is from the Department of Medicine, Western Reserve University School of Medicine, treated 20 patients suffering from this disease.

Besides being given a high protein, low fat diet supplemented by yeast, the treatment consisted of a combination of the nutritional agents, choline and cystine.

Choline prevents the deposit of fat in the liver. Cystine is the chief source of sulfur in food which is a necessary constituent of a complete diet.

The principal contributing cause of cirrhosis of the liver is alcoholism, but it may result from chronic poisoning with metals or from infectious diseases, especially syphilis. Dr. Beams states that in his group of patients the incidence of alcoholism was about 85 per cent.

Dr. Beams' study reveals that only patients with large livers were benefited by supplementing choline and cystine with the special diet. Twelve of the 20 patients with livers which were not enlarged did not respond to the treatment, whereas seven of the eight patients with large livers made a good recovery.

Citing the history of one patient whose life was saved by this treatment, the author says: "This case represents an instance in which choline and cystine appeared to supply the factors necessary to reverse the process in the liver. They could not be supplied by diet alone because the patient was not able to tolerate large amounts of food. In instances of this kind the choline and cystine are comparable to vitamin concentrates, which are often necessary in addition to diet in the treatment of certain deficiency diseases."

The author concludes with this cautionary statement: "It is important to emphasize the limitations of the treatment of cirrhosis. Up to the present time there has been no treatment which has been found that alters fibrosis of the liver. Recovery of liver function therefore must depend on the arrest or reversibility of the other pathologic changes which are found in cirrhosis."

Original Articles

ACUTE SURGICAL THROMBOTIC EMERGENCIES

JOSEPH E. BELLAS, M.D., F.A.C.S., A.B.S.
The Collins-Bellas Clinic
PEORIA

The prevention of thrombosis in relation to postoperative pulmonary embolism has been a special concern of ours for a number of years, ever since we started the use of thyroid extract and active motion on all our postoperatives, except hyperthyroid cases. We were encouraged to institute this routine procedure as a result of the favorable reports from other investigators, notably Waltman Walters[1,2] of the Mayo Clinic, the Schmieden Clinic of Alsace-Lorraine, and the Manchester England Hospital group. The basis for this procedure was predicated on the observation that in thyrotoxic cases, pulmonary embolism rarely occurred. The thyrotoxic factor and the increased circulation have been assumed to minimize circulatory stasis and hence coagulation.

Our overall incidence of pulmonary embolism in 4500 surgical cases is 0.11 percent. If we eliminate cases that did not receive thyroid extract and those who had preexisting preoperative thrombosis, that percentage incidence is reduced almost to zero.

We have become convinced of the positive value of thyroid extract and active motion in the prevention of postoperative pulmonary embolism and intend to continue its routine use despite the advent of heparin and dicoumarin.

Although heparin and dicoumarin have so far not proved adaptable for routine use, their combined utilization will undoubtedly open more widely the field of occlusive vascular surgery to the general surgeon who in the past has been somewhat hesitant about invading this branch of surgery.

Needless to say, I cannot overemphasize the importance of the joint and close cooperation of internist and surgeon in the surgery of vascular occlusions.

Vascular surgery in this discussion will concern itself mainly with vascular occlusions, venous and arterial.

Venous Occlusions.—Occurring for the most part in the lower extremities, venous occlusions may affect the superficial veins or the deep veins of the legs.

When the *superficial* veins or the ascending saphenous veins are involved by a propagating thrombosis, high ligation near the saphenofemoral junction should be done. When the migrating thrombus reaches the common femoral, it may already be too late to prevent pulmonary embolism. An attempt, however, should be made to suction any possible accessible clots from the common femoral both above or below the saphenous junction.

Thrombotic occlusions of the *deep* veins of the legs are more likely to be a cause of pulmonary embolism without having been recognized, than thrombosis of the superficial veins. A reliable diagnostic test for deep vein thrombosis is Homans' sign[3,4] — or pain in the calf of the leg on forced dorsiflexion of the foot. This condition may or may not be accompanied by swelling or cyanosis of the ankle.

Treatment is at first conservative. The patient is put to bed for three days with the leg elevated and bicycle muscular exercises are carried out in

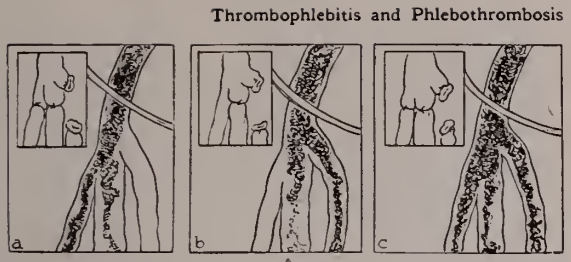


Figure 1. Showing variations in migration of thrombosis in superficial and deep veins of the lower leg. (from Ochsner, Alton and de Bakey, M.: Lewis' Practice of Surgery. Vol. 12, Ch. 5-B)

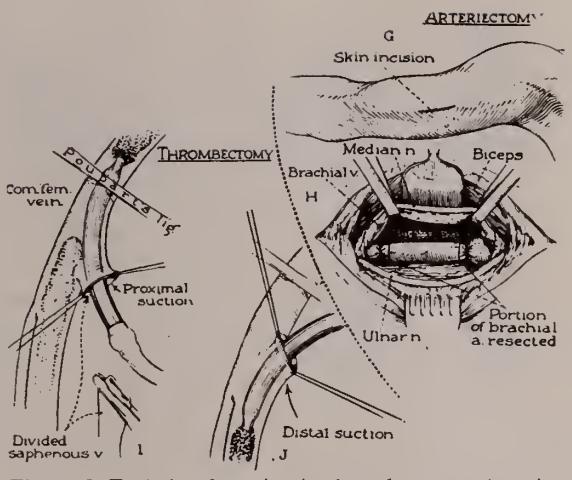


Figure 2. Technic of suction in thrombectomy. Arteriectomy is performed in cases of persistent local sympathetic irritation from trauma. (from de Takats, G.: Surgical Clinics of N. Amer., Feb. 1942)

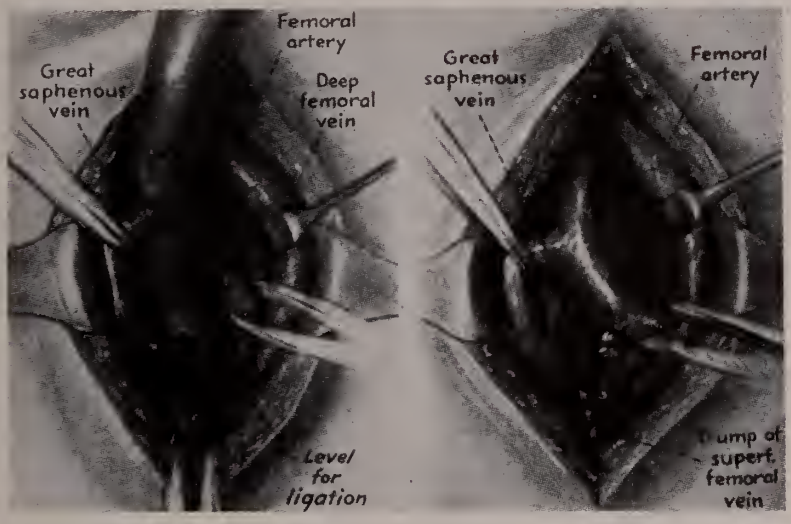


Figure 3. Operation for deep leg-vein thrombosis. (from Lam, C. R.; Surg. Clin. of N. Amer., Oct., 1943)

bed. If the pain does not disappear or reappears after renewal of patient's activities, the operative method of division and ligation of the superficial femoral below the profunda femoral vein should be urged at once.

Complexities of thrombosis may occur in the main channels of the deep veins. This requires variations in surgical management which will best be illustrated in the following figures. (See Figures 1, 2, 3.)

After these procedures, these patients should be heparinized and dicoumarinized to prevent further clots from reforming.

Arterial Occlusions

Sources of emboli:

Most emboli or thrombi emanate from the heart. These may arise from:

1. Mural thrombus at infarct of coronary thrombosis.
2. Clot originating in dilated left auricle in fibrillating heart.
3. Vegetations from valves in bacterial endocarditis.
4. Another source for an arterial plug may arise from a displaced arteriosclerotic plaque.

Locations:

Emboli tend to be arrested at bifurcations. Although these may occur in both the upper and lower extremities over 70% develop at four levels.

1. Bifurcation of common femoral into superficial and deep femoral arteries.
2. Bifurcation of common iliac arteries into external and internal iliac arteries.
3. Bifurcation of aorta.
4. Bifurcation of popliteal arteries.

Pathologic physiology:

The disturbance of function and of the physiologic mechanism is affected in the following manner.

1. Lodgement of the arterial plug causing immediate impairment of the circulation.
2. Massive vasoconstriction affecting not only the main artery distal to the obstruction but also all the vessels of the extremity further crippling the already impaired circulation.
3. Secondary propagation of blood clot especially proximal to the embolus adding still another factor to a crippled circulation already overburdened. This may lead to a false pulse, the latter being transmitted downwards through the soft clot to a point below the seat of the actual obstruction.

If in doubt as to the upper limit of the occlusion, a histamine or morphine flare test may be done. This is performed by the intradermal injection of one drop of 1:1000 solution of either histamine or morphine at different levels. The lowest level showing a red flare in five minutes indicates the lowest level of adequate circulation.

Objectives of Surgical Treatment.—These may be described as four in number and are directed:

1. To relief of vascular spasm.
2. To measures of prevention or reduction of propagating thrombosis by heparin and dicoumarin.
3. To the removal of the embolus by embolectomy.
4. To the removal of the non-viable part at optimal level.

Relief of vascular spasm should be undertaken preoperatively by the intravenous administration of papaverine and by paravertebral sympathetic block. At operation, periarterial sympathectomy may be done and postoperatively the use of papaverine should be continued.

Reduction of propagating thrombosis is carried out by the use of heparin and dicoumarin postoperatively. The administration of these two preparations should always be accompanied by laboratory tests of clotting time and prothrombin time. Although dicoumarin may be given as soon as the patient is awake, because of its delayed action, three to four hours must elapse before heparin intravenous drip is instituted in order to permit cessation of capillary oozing in the operative field.

Embolectomy consists of the operation of removal of the lodged embolus by arteriotomy. Of primary importance is the necessity of performing the operation within *ten* hours of the onset of symptoms. Experience has shown that maximum results are obtained only by early operation. The best figures are those of Nystrom,[5] a Swedish surgeon, who in thirty-two cases was able to restore the circulation in 50% by an early operation. De Takats[6] in this country has had twenty-eight cases of arterial occlusions but only in three was he able to do the early operation. Later embolectomy has been performed especially where papaverine and sympathetic block have been conscientiously applied but the results, of course, have not been favorable.

Removal of the non-viable portion or amputation of the limb is done in late or in unsuccessful cases of embolectomy at the optimal level. Estimation of the lowest viable level can be determined by the histamine flare test or morphine flare test, or amputation may be attempted after demarcation of the gangrene has become apparent. (See Figures 4 and 5.)

Since we have become "occlusion conscious" we have had an increasing number of cases of venous occlusion involving thrombectomy and two of arterial occlusion involving embolectomy.

Thrombectomy

Case 1. A married woman of 59 with a background of recurrent attacks of thrombophlebitis of the right leg for years, but with no history of a recent acute attack, developed during the week following the removal of her gallbladder, a gradually increasing thrombophlebitis of the long saphenous vein. In order to prevent the complications of a migrating thrombus, a high ligation of the long saphenous vein was done at the junction with the common femoral vein. At operation

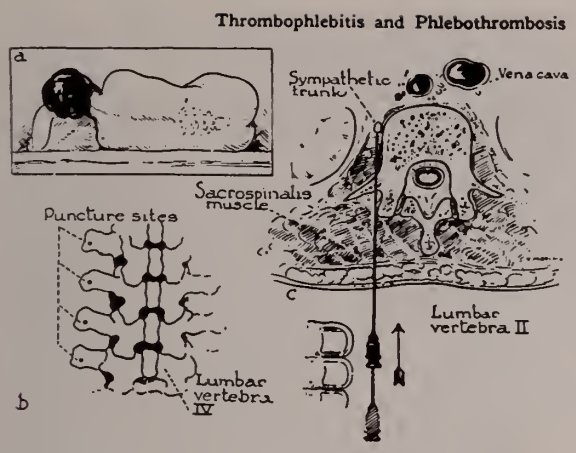


Figure 4. Technic of paravertebral sympathetic block — very useful in venous or in arterial thrombosis. (from Ochsner, Alton and de Bakey, M.: Lewis' Practice of Surgery, Vol. 12, Ch. 5-B)

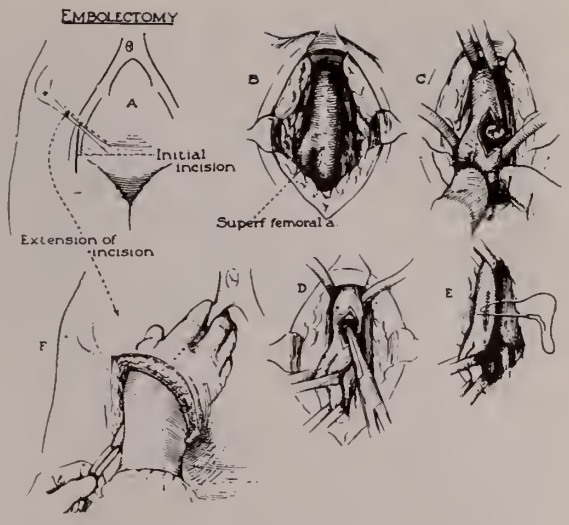


Figure 5. Technic of embolectomy. (from de Takats, G.: Surgical Clinics of N. Amer., Feb. 1942)

the venous thrombus was seen to extend almost to the junction. Because of this, I could not be sure that some extension had not already migrated into the femoral. Heparin was started intravenously and steps were taken to secure dicoumarin. At this time my worst fears were realized when the patient suddenly developed a severe pain in the right chest accompanied by marked respiratory distress. Physical examination and x-ray confirmed the presence of a triangular-shaped lesion at the right base of the lung posteriorly. A diagnosis of pulmonary embolism was made. A high fever accompanied this episode and the patient was in poor condition.

In addition to the supportive treatment, 500 mg. dicoumarin (Abbott) were given by mouth. Prothrombin time was checked daily and was considered within the therapeutic range in two days. Additional doses of dicoumarin were given using the prothrombin time as a guide.

The patient's condition began to improve and in twelve days the lesion in the lung had entirely gone. The area of thrombophlebitis on the right leg definitely resolved so as to be converted into a painless cord. The patient left the hospital on the sixteenth day after the pulmonary embolism, in good condition.

Case 2. A married woman of 56 was subjected to bilateral vein ligation for advanced varicose veins and to a colpoperineoplasty about one week after a cholecystectomy for a marked hydrops of the gallbladder with stones. On the right side, the sapheno-femoral junction was indicated by a bulb-like swelling which contained a thrombus. The long saphenous vein was divided just below the junction, the common femoral vein compressed, and a well organized adherent thrombus presumed to be of at least several weeks duration was milked out by pressure and suction from above downwards through the open upper end of the saphenous vein. There appeared to be no extension of the thrombus into the lower part of the femoral vein. Both ends of the divided upper end of the long saphenous were ligated.

In anticipation of giving heparin and dicoumarin, a prothrombin time was taken and found to be about 42% of normal. This was assumed to be due to the disturbance of liver function as a result of the chronic gallbladder infection and as a result of the gallbladder surgery.

Because of this, heparin and dicoumarin were given cautiously and an outline for emergency treatment of possible pulmonary embolism was attached to the chart. At one time the prothrombin time was reduced to as low as 7.82% of normal but this was readily controlled by intravenous injections of 40-60 mg. Hykinone[7] and a blood transfusion. These procedures were undertaken despite the fact that no bleeding occurred at this time.

In this case, the reformation of a new thrombus was apparently prevented as the patient developed no signs of pulmonary embolism. The patient was observed for fourteen days before she was permitted to go home.

The patient did develop some bleeding later from the site of colpoperineoplasty but this was found to be due to a superficial breakdown of the repair and a few stiches at the office readily stopped the bleeding.

Case 3. This was an instance of deep leg vein thrombosis which occurred in a young unmarried woman of 23 about nine to ten days after an uncomplicated pelvic operation. It was ascertained, however, that the patient had been having recurring pains in the calf of her left leg for the preceding four to six months associated with tiredness of the same limb.

On this occasion she incurred a gradually increasing pain in the calf of the left leg and along the ascending saphenous vein of the left thigh. This was accompanied by a gradually developing brawny edema and cyanosis of the leg below the knee. Despite bi-

cycle muscular exercises in bed, Homans' sign on forced dorsiflexion of the foot was persistently and increasingly positive. In consequence an operation was performed within three days consisting of suction of numerous thrombi through the superficial femoral vein below the profunda, and through the upper end of the saphenous vein with division and ligation of the superficial femoral vein and ascending saphenous vein. The improvement thereafter was rapid. No pulmonary embolism or other complication occurred. The cyanosis and induration disappeared. A generally increased diameter of the affected limb persisted for some time but all distressing symptoms completely disappeared.

Three additional cases of deep leg vein thrombosis have been encountered and operated. The incidence of these cases are in direct proportion to the acuity of the clinician's awareness and observation. In two of these cases, the process of thromosis had already reached above the site of ligation and necessitated the extraction or suction of clots both below and above the ligated point. In one case, the ligation of the superficial femoral vein was performed before the thrombosis had ascended to that level. All the patients made satisfactory recoveries without the development of pulmonary embolism.

Embolectomy —

Case 1. This case of arterial embolism involving a 79 year old male with heart disease and advanced emphysema, affected the proximal five to six inches of the right femoral artery with the exception of a one-inch portion just below the inguinal ligament. The patient was first seen by Dr. D. C. Ryan who made the diagnosis of arterial embolism. This patient was operated about five hours after onset of symptoms and an elongated clot at least four inches long was removed by upward milking and suction. It was very gratifying to see the recurrence of pulsation along a six-inch visible portion of the femoral artery after completion of the operation. The same technic was employed as indicated in Figure 5.

Heparin and dicoumarin were started and on the basis of the operative results, we thought that there was a good chance to save the limb. For twenty-four hours the color of the limb remained practically unchanged but thereafter the cyanosis became definitely worse and in the failure of restoration of sensation by this time, hope was lost for the preservation of the leg. In a search for the explanation of the apaprent reformation of a new obstructing thrombus, we found that the floor nurses had on two prolonged occasions discontinued the intravenous administration of heparin without notifying the interns, the residents, or the attending physicians. We cannot, of course, be certain that the continuous administration of heparin would have prevented a new clot from forming, but this was the only factor that we could discover that deviated from proper postoperative management.

(In this connection, as we have found to our cost, it might be well to emphasize that dependable special nurses day and night would be essential in attention to these important details.)

In five days a definite line of demarcation had formed just above the knee. Under refrigeration anesthesia, a midthigh amputation was done. Section of the femoral artery disclosed the presence of another thrombus in the lower part of the artery that had been seen pulsating after embolectomy. Despite the patient's eventful experiences, the heart and lung conditions improved under medical management and the stump healed slowly but satisfactorily.

Case 2. The second case involved an 82 year old woman whom Dr. E. J. Giunta was called upon to see because of a sudden attack of pain below both groins which felled her to the floor. The severe pain left the right leg, but settled in the upper part of the left thigh and was excruciating in nature. The left leg became a dead white color. All sensation was abolished and the leg became cold. The patient was sent to the hospital. When I saw the patient, the leg appeared markedly cyanotic, cold to touch, except on the upper thigh and entirely devoid of all sensation. The only place where a pulse could be felt was a short distance below the left groin. The heart was fibrillating and the patient appeared in poor condition. A diagnosis of an acute embolic occlusion was made. Papaverine was given beforehand and an operation was decided upon to locate and remove the embolus.

The operation was done within four hours of onset of acute symptoms. A longitudinal incision was made below the left groin opening into Hunter's canal. The pulse of the femoral artery was followed down until it ceased at the junction of the superficial and deep femoral arteries. Below this point the artery seemed markedly contracted and cord-like and gave a striking indication of the degree of intense vasoconstriction. An incision was made over the artery and an organized thrombus, one and one-half inches in length, was removed. The artery was then closed by interrupted plastigut* [8,9] and a venous graft sutured around the artery. Heparin was injected into the artery. A section of the femoral artery well above the site of embolus was then painted with phenol and alcohol to secure the effect of a periarterial sympathectomy. The incision was then closed. *Postoperative Treatment*: Dicumarol (Abbott) 300 mg. was given as soon as the patient was awake. Heparin was administered four hours later.

By the next morning there was return of color, warmth, and of sensation. Soon after vibration sense also reappeared but the last thing to be restored was the sense of position of the toes. Dicumarol was continued for twelve days. After fourteen days, patient was walking and left the hospital in good condition.

These experiences have taught us that although

*A non-reacting nonabsorbable suture

the results are not always successful it is well worth while to attempt embolectomy in arterial occlusions. The important point is to perform the operation as soon as possible within the first ten hours from the onset of symptoms. In the postoperative care, the first twenty-four hours are the most important and heparin must be given continually until the effect of dicoumarin becomes manifest. The same applies to venous occlusions.

I have no figures to indicate what percentage of thrombectomy cases are prevented from having thrombotic complications, but with arterial embolectomy, we have reason to believe from statistics available in the literature, that we have a good chance of saving 50% of the limbs by proper management.

REFERENCES

1. Walters, Waltman: Tbyroid extract to reduce postoperative embolism. Coll. Papers Mayo Clinic, 1926, xviii, p. 1051.
2. Idem: Method of reducing incidence of fatal postoperative pulmonary embolism. Results of its use in 4500 surgical cases. Jour. Surg., Gynec., and Obst. (Jan.) 1930, p. 154.
3. Homans, John: Thrombosis of the deep veins of the lower leg, causing pulmonary embolism. New England Jour. Med., 211: 993-997 (Nov. 29), 1934.
4. Idem: Exploration and division of the femoral and iliac veins in the treatment of thrombophlebitis of the leg. New England Jour. Med., 224: 179-187 (Jan. 30) 1941.
5. Nystroni, Gunnar: Ann. Surg., (Oct.) 1930, p. 498.
6. de Takats, G.: Surgery of acute vascular occlusions. Surg. Clin. of N. Amer., (Feb.), 1942.
7. Abbott Laboratories. Personal communication.
8. Collins, C. U. and Bellas, J. E.: The influence of sutures on operative wounds. Tr. West. Surg. Assn., 1938, 316-399.
9. Bellas, J. E.: Suture Studies: A new suture. Arch. Surg., (Dec.) 1940, Vol. 41, 1414-1425.
10. Ocbsner, Alton and de Bakey, M.: Thrombopblebitis and phlebothrombosis. Lewis' Practice of Surgery, xii, Cbapt. 5-B.
11. Lam, C. R.: Pulmonary embolism: Metbods of prevention. Surg. Clin. of N. Amer. (Oct.) 1943, 1304-1317.
12. Evans, J. A.: Anticoagulation therapy of postoperative venous thrombosis and pulmonary embolism. Surg. Clin. of N. Amer., (June) 1944, 534-537.
13. Nicholson, M. J.: Treatment of thrombopblebitis by paravertebral sympathetic block. Surg. Clin. of N. Amer., (June) 1944.

The Nazi concentration camps created a grave source of dissemination of tuberculosis in Europe. Disease contracted there, and now in its incipiency, may be expected to develop for months or years after the general repatriation, which is now well under way. The recognition and control of tuberculosis in men returning from these concentration camps will be a problem for the health officers of every country whose nationals were imprisoned. U. S. Army Dept. Bulletin, October, 1945.

THROMBOCYTOPENIC PURPURA FOLLOWING ANGINA

Report of Fatal Case with Autopsy

KENNETH M. CARROLL, M.D.

EVANSTON

As knowledge of the relation of drugs, infection, and certain other conditions to thrombocytopenic purpura increases, the number of cases of the so-called idiopathic form of the disease decreases. Infection, as an exciting cause of purpura, is mentioned in most discussions of the etiology of thrombocytopenia.[1] Septicemia, tuberculosis, certain of the exanthemata, and, more recently, infectious mononucleosis[2], and catarrhal jaundice[3], have all been incriminated. The etiologic importance in purpura of localized infection in the throat has been emphasized by many writers[4]. Jones and Tocantins[5] state that 40 per cent of their cases had a history of frequent attacks of tonsillitis. Dalitsch[6] reported a case of purpura associated with fusospirillar infection of the throat. The recent literature, however, contains no reports of purpura secondary to infection in the throat.

CASE REPORT

The patient, a 52 year old, Italian woman, contracted a severe "sore throat" on May 1, 1945. She consulted a physician on May 5, and was given some 5 grain tablets of acetylsalicylic acid. She took an unspecified number of these tablets and obtained considerable relief. A few days later, however, she noticed small red spots on various parts of her body and had some bleeding from the nose and mouth. The spots persisted, but for the next two or three weeks the patient stated that she felt "all right". On May 24, she had a sudden attack of epigastric pain accompanied by nausea and vomiting. She was admitted to the hospital on May 31, complaining of weakness and dizziness, on the medical service under the care of Drs. R. W. Keeton and E. J. Ranke. There was no history of blood in the urine or feces and there had been no vaginal bleeding since the menopause at 45 years of age. Except for an appendectomy and cholecystectomy in 1921, and a mild diet-controlled diabetes for one year prior to admission, the patient had always been in apparently good health. The family history was not contributory.

Physical examination revealed a somewhat obese, white female in no apparent distress. There were purpuric spots distributed over the entire skin surface, varying in size from less than a millimeter to three centimeters in diameter. The buccal and pharyngeal mucosae were spotted with petechiae, but the mouth and throat were otherwise normal. The heart and

From the St. Francis Hospital, Pathologic Department, Leo F. Bleyer, M.D., Director.

lungs were entirely normal. The spleen was not palpable nor were there any other abdominal findings. There was no lymphadenopathy. Temperature was 98.4°F.; pulse 100; and blood pressure 158/98.

On admission the blood findings were: erythrocytes, 1,760,000 per c.mm.; hemoglobin, 3.75 grams per 100 c.c.; and leukocytes, 5,100 per c.mm. with 64% segmented neutrophiles, 4% "stabs", 27% lymphocytes, 4% monocytes, and 1% eosinophiles. The platelets numbered 26,400 per c.mm. The coagulation time was three minutes; the bleeding time more than ten minutes; and there was no clot retraction in 24 hours. The prothrombin time was 92% normal. Specimens of urine and feces gave positive tests for blood. The electrocardiogram was within normal limits.

During the first month of her hospital stay, the patient received a total of 4000 c.c. of whole blood. Other therapy included vitamin K, ascorbic acid, calcium lactate, crude and refined liver extract, and yellow bone marrow. The diabetes was controlled by small doses of insulin and diet. Her temperature remained essentially normal. Many new ecchymoses appeared and there were frequent nose bleeds. The erythrocytes varied between 1,760,000 and 4,310,000 per c.mm.; the hemoglobin between 3.15 and 12.75 grams per 100 c.c. The platelets rose to 70,000 per c.mm. on June 14, and this was the highest value they were to attain. On June 31, there were only 12,400 platelets per c.mm. and on July 2, there were "none seen on smear". The white blood cells were maintained at a level of about 5000 per c.mm. A differential count on June 25, showed 45% segmented neutrophiles and 16% "stabs"; the neutrophiles were described as "toxic". On July 2, the total white count rose to 7,300 per c.mm. with 35% segmented neutrophiles, 13% "stabs", and 51% lymphocytes. A sternal marrow aspiration was done on July 7, by Dr. E. J. Ranke and a study of the smears revealed normal erythropoiesis, "toxicity" and "shift to the left" in the granulocytc series, and a normal megakaryocyte series. The differential marrow count is shown in Table 1.

From July 2 until her demise the patient received a total of 5500 c.c. of whole blood. She had an almost continuous diarrhea; the stools giving positive tests for blood on several occasions. Petechiae continued to appear on the skin and multiple hematomata developed at the sites of the repeated vene-punctures and intramuscular injections. The erythrocytes did not rise above 3,090,000 per c.mm., nor the hemoglobin above 7.25 grams per 100 c.c. Platelets were either absent or very scarce as determined by smears. On July 9, the leukocytes numbered only 4000 per c.mm. By July 13, a huge abscess had developed on the right buttock as a complication of intramuscular therapy. The temperature rose to 101.4° F. and began to run a spiking course. On July 16, the leukocytes had fallen to 1900 per c.mm. with 45% segmented neutrophiles, 28% "stabs", and 21% lymphocytes. On July 18 and 19 the patient had chills and sweats with temperature elevation as high as 102° F. There were physical signs of consolidation over the left upper chest and penicillin was started. During the next few days the patient became quite dyspneic and developed a hoarse cough, productive of whitish sputum. On July 20, the white blood count was 2300 cells per c.mm. with 35% "stabs", 45% segmented neutrophiles, and 17% lymphocytes. On July 21 the total leukocyte count was 2200 cells per c.mm. X-ray of the chest showed "spotty infiltration" of both lung fields. The temperature fell to normal and was not elevated again. The patient became increasingly dyspneic and cyanotic and expired on July 24. A chest x-ray taken several hours before death showed "a mottled exudative type of infiltration in both lung fields".

POST-MORTEM FINDINGS

There were over 500 c.c. of blood in each pleural cavity. The visceral and parietal pleurae were mottled with petechiae. Both lungs presented a granular cut surface spotted with dark red areas. Microscopically, there were diffuse intra-alveolar hemorrhages. The pericardial sac contained about 500 c.c. of liquid blood. The heart weighed 310 grams and its epicardial surface was covered with fibrinous deposits and streaked with small hemorrhages. The myocardium was dark red in color and showed gross and microscopic hemorrhagic infiltration. There was subendocardial hemorrhage, most marked in the auricles. There was a moderate amount of coronary atheromatosis. The peritoneal cavity contained about 500 c.c of semi-clotted blood. The inferior surface of the diaphragm, the mesenteric fat, the parietal peritoneum, and the serosa of the small bowel were studded with petechiae. The stomach was filled with brown, watery fluid and the mucosa was covered with small hemorrhages. The liver weighed 1750 grams. The capsule showed scattered ecchymoses. The liver parenchyma was a diffuse brownish color and microscopically there was cloudy swelling and fatty changes. The spleen weighed 120 grams. The pulp was brownish colored and the follicles obscured. Microscopically, the pulp contained an increased amount of hemosiderin, the follicles were compressed, and the sinuses collapsed. There were no gross hemorrhages in the pancreas or adrenals. The kidneys weighed together 350 grams. The kidney parenchyma was pale whitish-yellow with indistinct markings. The pelves and calyces were filled with semi-clotted blood. Microscopically, the tubular epithelium showed cloudy swelling; the glomeruli were intact. The reproductive organs were shrunken and fibrosed. The mesosalpinx showed ecchymoses on both sides. The abdominal aorta showed incrustation of the intima with atheromatous plaques. Smears made directly from the sternal marrow showed a normal megakaryocyte series, a markedly diminished granulocyte series, and erythroid hyperplasia. (See Table 1.)

COMMENT

The history of a severe throat infection preceding the onset of purpuric symptoms is clear cut in this case. The only medication the patient received prior to the onset was acetylsalicylic

TABLE 1

Differential Sternal Marrow Counts*
(Expressed as per cent based on counting 500 cells).

	7-4-45	7-24-45 (Post-mortem)
Undifferentiated stem cells	0.0	4.0
Granulocyte series		
Myeloblasts	2.0	4.8
Promyelocytes		
Eosinophil	0.0	0.5
Neutrophil	0.25	1.8
Myelocytes		
Eosinophil	3.75	0.0
Neutrophil	45.50	3.8
Metamyelocytes		
Eosinophil	0.0	0.0
Neutrophil	9.0	3.0
"Stab" forms		
Eosinophil	0.0	0.0
Neutrophil	7.0	1.5
Segmented forms		
Eosinophil	0.5	0.0
Neutrophil	1.0	0.0
Total	69.0	15.4
Erythrocyte series		
Megaloblasts	2.0	23.2
Pronormoblasts	0.25	0.0
Basophilic normoblasts	15.50	38.0
Normoblasts	8.25	18.0
Total	26.0	79.2
Megakaryocytes	2.0	1.7
Lymphocytes	3.0	0.0

*Differential bone marrow counts were done by Miss C. A. Widman, M.T.

acid. There was nothing to suggest that an unusually large amount of this drug had been consumed, and the only reported case[7] of purpura following salicylate therapy occurred after massive intravenous administration. It seems unlikely, therefore, that the drug played a part in the production of the thrombocytopenia.

The peripheral blood studies suggest a "toxic" depression of the platelet-producing elements in the early stages of the disease with a later extension to include all the leukoblastic elements, resulting in a great reduction in the total leukocyte count, the granulocytic percentage remaining at near normal levels. The megakaryocytes of the bone marrow were found to be normal, both in structure and number. This is in accord with the findings of most observers[8]. The small size of the spleen and the absence of any pathologic changes in this organ suggest that the spleen played no part in the production of the thrombocytopenia and that the latter was due to insufficient platelet formation in the marrow.

The massive hemorrhages found at autopsy were reflected in the marked anemia in the peripheral blood and the compensatory erythroid hyperplasia discovered in the post-mortem marrow smears. This hyperplasia combined with the reduction in the granulocytic series resulted in an inversion of the normal myelo-erythroid ratio in the bone marrow. (See Table 1)

SUMMARY

A fatal case of thrombocytopenic purpura following a severe pharyngeal infection is reported. The blood picture, bone marrow and autopsy findings are discussed.

REFERENCES

1. Kracke, R. R.: Diseases of the Blood, Ed. 2, Philadelphia, J. P. Lippincott; p. 441, 1941.
   Wintrobe, M. M.: Clinical Hematology, Philadelphia, Lea and Febiger: p. 567, 1942.
   Rosenthal, N., in Downey's Handbook of Hematology, New York, P. B. Hoeber Inc., p. 518, 1937.
2. Lloyd, P. C.: Thrombocytopenic Purpura in Infectious Mononucleosis, Am. J. M. Sc., 207: 620, 1944.
3. Woodward, T. E.: Thrombocytopenic Purpura Complicating Acute Catarrhal Jaundice, Ann. Int. Med., 19: 799, 1943.
4. Giffin, H. Z., and Holloway, J. K.: Hemorrhagic Purpura, Med. Clin. N. Amer.: 7, 241, July 1923.
   Williamson, C. S.: Purpura Hemorrhagica, Med. Clin. N. Amer. 7: 379, September 1923.
5. Jones, H. W. and Tocantins, L. K.: A Discussion of Classification and Etiology of Purpura Hemorrhagica, Med. Clin. N. Amer. 16: 181, July 1932.
6. Dalitsch, W. W.: Influence of Fusospirillar Infection on Thrombocytopenic Purpura, Med. Clin. N. Amer. 17: 1677, May 1934.
7. Ashworth, C. T. and McKemie, J. F.: Hemorrhagic Complications with Death, probably from Salicylate Therapy, J.A.M.A., 126: 806, Nov. 25, 1944.
8. Wiseman, B. K.; Doan, C. A. and Wilson, S. J.: The Present Status of Thrombocytopenic Purpura, J.A.M.A., 115: 8, July 6, 1940.

ALLERGIC IRITIS

Louis Bothman, M.D.,
CHICAGO

The allergic nature of conjunctivitis, especially vernal catarrah has been demonstrated by many writers. Other forms of ocular allergy are less known. This report will serve to call attention to the literature on the subject and present a few cases in which iritis was not due to focal infections in patients who gave histories of allergic attacks or, positive skin reactions or both.

There are two distinct forms of iritis due to allergy. The first is associated with acute attacks such as occur in Quincke's edema or migraine, both of which can occur in the same patient at the same time. The second is that type of recurrent iritis commonly attributed to focal infections. Those cases due to bacterial allergy are omitted and only those due to protein allergy in patients free from focal infections are presented.

A. C. Wood[7] demonstrated allergic iritis in dogs, sensitized to uveal pigment by intra ocular injection. This iritis occurred in the normal eye when the pigment was later injected intraperitoneally.

Dodd and Rados[8], Riehm[9], observed similar reactions when using horse serum. Iga[10] found changes in the uvea and demonstrated a nodular lymphocytic infiltration of the choriocapillaris in animals sensitized to horse serum.

Roch[1] presented the case of a man 28 years old with migraine, iritis and secondary glaucoma. His recurrent attacks of iritis which were accompanied by tingling of the fingers, nausea, emesis, oral anaesthesia and abdominal cramps, were precipitated by eating eggs or foods containing eggs or certain laxatives.

Parry[2] recorded 2 cases of iritis in women. In one the attacks were brought on by eating eggs; in the other there was sensitivity to eggs and chicken feathers.

Kennedy[3] reported massive vitreous exudates and cyclitis in a patient with marked neurologic findings who was sensitive to milk and veal.

Brückner[4] saw a mild serous iritis in a patient suffering an attack of migraine.

Wood[5] reported 4 cases of iritis which he thought were due to gout but his description fits the typical picture of angioneurotic edema associated with eye symptoms, among them iritis.

Theodore and Lewson reported a case of bilateral iritis with much exudate and fluffy K.P. which occurred during the second attack of serum sickness 3 weeks after administration of serum for pneumonia. The attack completely subsided in 10 days, leaving 20/20 vision in each eye.

We[6] recorded 4 cases of iritis. The first was a mild serous iritis in a woman 52, sensitive to spinach, garlic and animal epithelium. The second was a young woman with recurrent iritis for 7 years sensitive chiefly to house dust. The third, a man of 37, with recurrent attacks for 14 years who was sensitive to house dust, feathers, molds, staphylococcus aureus and some pollens. The fourth was a man of 35 with attacks for 12 years who was sensitive to molds.

Case Reports: The following cases illustrate typical recurrent iritis. All have had complete focal infection studies with elemination of foci and continued to have attacks of iritis for several years. All have had complete allergy tests and the results presented. These 6 cases were chosen because they had complete tests.

Case 1. Mrs. M. P. now 36 years old was first seen at the University of Chicago Clinics on July 16, 1928 when she had pain and redness in the right eye for

Read before the Section on Eye, Ear, Nose and Throat, 104th Annual Meeting, Illinois State Medical Society, Chicago, May 16, 1944.

10 days. RV=20/30 +1. L 20/40 +1. There was marked ciliary injection and the anterior chamber was ¾ filled with fibrin. There were many K.P. There was a posterior synechia at 7 o'clock and a clouded vitreous. She had 2 milk injections and the usual atropine and heat. On August 17, 1928 several striated hemorrhages appeared in the retina around the disk. The conjunctiva contained many large follicles and the eyes itched. The conjunctiva was normal by March 30, 1929.

On October 14, 1929 she returned with a slight left conjunctivitis and a linear hemorrhage was noted near the left disk at 5 o'clock. There was a chalazion of the left upper lid removed on May 20, 1930. On January 2, 1931 there was a velvety appearance of the left larsal conjunctiva and occasional follicle of the lower fornces. On October 5, 1931 she was delivered of a normal female infant. The conjunctivitis subsided in July, 1932. On September 24, 1932 there was another attack of R. Iritis. Many small K.P. were present, many cells and some fibrin. There was a posterior synechia from 6 to 8 o'clock. The disk and macula were normal. RV=20/40 +1. She entered the hospital for focal infection study. She was given 5 injections of Typhoid Vaccine. The vision dropped to finger counting at 20 inches. More fibrin and exudate filled the pupillary space. By November 12, 1932 the eye had recovered and the vision was 20/40. On December 14, the eye was red, and fibrin and cells were seen in the anterior chamber. The follicular conjunctivitis appeared (Atrophine Sensitivity). On December 21, 1932 several small round infiltrates were seen in the right cornea.

Complete focal study revealed a cyst in the molar and possibly diseased tonsils. The tooth was extracted and a tonsillectomy done. Tuberculin tests on November 1, 1932 were negative.

On January 11, 1933 there was a mild recurrence of R. iritis which was gone on March 4. On February 18 two small chalazia appeared on the L lower lid. Chalazion of the left lower lid removed on April 8, 1933.

On June 8, 1933 the R. eye was red and several small corneal infiltrates appeared and there were a few cells in the aqueous. A few deep 2 mm long corneal blood vessels appeared between 7 and 9 o'clock. 10 c.c. of blood was injected subcutaneously. The corneal infiltrates continued until June 5, 1934. She used scopolamine and had intravenous injections of calcium gluconate and sodium thiosulphate. On August 2, 1934 the left eye became red, painful and had cells in the aqueous, small K.P., and posterior synechia at 1:30 and 8 o'clock. By September 17, 1934 the eye was clear.

The left eye was red on January 26, 1935 but only 10 to 15 cells per slit lamp field were noted and the eyes were pale on February 23, 1935.

On March 27, 1935 she had numbness over the left side of face, lid and gums similar to the attack which lasted 1 month in May, 1929. At that time the sensation extended to arms and legs as well.

On October 29, 1936 there was blurring of the right eye. RV was 20/30 —3 and a few cells in the aqueous.

On July 17, 1937 the right eye was red, painful. Posterior synechiae extended from 2 to 11 o'clock. Tuberculin injections were started and continued to August 23, 1937. Calcium gluconate was given intravenously.

On January 15, 1938 there was a R. sided paraesthesia of the shoulder, arm and leg. Pain occurred in the right eye on January 29 but only a few cells were seen in the aqueous.

In June, 1938 she had a red left eye for 1 day. RV=20/25 +2.

In August, 1937 she was sent to allergy and was found to react to, alternaria, penicillium, aspergillus fumigatus niger and hormodendrum, monilia and mucor. Complete testing was not done and no treatment was given.

On January 31, 1944 she was seen again with pain, redness and blurring of the left eye. L vision was 20/70. There was very mild ciliary injection, a fine thin sheet of K.P. — many cells in the aqueous and the pupil was dilated to 2x4 mm. There was a thin gray posterior anular synechia. The disk and tension was normal.

Dr. Rappaport reported that the patient was sensitive to:

MOLDS — alternaria, aspergillus, hormodendrum, penicillium, mucor.
POLLENS: grasses (with concentrated solutions) Orchard grass, June grass, red top, Timothy.
WEEDS (with concentrated solutions) Giant and short ragweed.
FOODS — Banana, pecan, celery, cloves.

Case 2. F.J.H. now aged 38 years, first seen November 22, 1928. The right eye had been removed following an accident in April, 1918.

His first attack of iritis in the left eye began June 6, 1918. This cleared by September and he was free until November 17, 1926, when the second attack occurred lasting until January 14, 1927. The third attack began November 8, 1929. The left vision was 20/12 +3. There was a mild ciliary flush, many small uniform, round gray dot K.P., over the lower 2/3 of the cornea, and many cells in the aqueous. The pupil was round and dilated to 8 mm. Fine dust pigment lay on the anterior lens capsule. The tension was 18 mm of Hg. In the extreme lower nasal periphery, and the upper anterior were two very small round atropic lesions in the choroid. In the periphery opposite 6 o'clock was a clover-leaf shaped lesion 1/3x1/4 P.D. in size containing some pigment in the center.

Focal infection study revealed some pus stripped from prostate for which he had adequate treatment. X-ray showed a few calcified nodes at the hilum. The tuberculin tests were negative.

He has been under observation regularly since 1931

and has had repeated check up for infections and none found.

During several attacks, tiny gray nodules were present on the pupillary border but these left only a thin gray posterior synechia on the temporal side from 1:30 to 4 o'clock.

At present, the pupil is 4x5.5 mm horizontally. There are old fine K.P. on the lower 1/3 of the cornea and a very thin grayish membrane on the lens capsule. The vision is 20/25 unaided and 20/12 with a hyperopic cylinder. The disk macula and tension are normal. The choroidal scars remain. He became sensitive to atropine and developed a node on the nasal sclera while using this drug. In January, 1942, he began to have superficial corneal infiltrates just inside the limbus. Several of these coalesced to produce superficial scars 2 to 3 mm in diameter.

He has had all the known therapy for iritis including, typhoid vaccine, proteolac, calcium gluconate, sodium theosulphate, neosalvarsan, streptococcic vaccine, without preventing attacks.

In April, 1942, he was tested by Dr. B. Z. Rappaport who found him sensitive to:

MOLDS: Hormodendrum, penicillium, aspergillus.

ENVIRONMENTAL SUBSTANCES: Kapok, silk, feathers, tobacco, glue.

FOODS: Banana, ginger, fig, hops, walnut, cauliflower, dill, lamb, clam, halibut, allspice, pepper.

He eleminated the foods to which he reacted and began injections to desensitize him to molds. The treatment was interrupted when he reported for army service in October, 1942. He was discharged in July, 1943. He had mild keratitis during August and September and again in February, 1944. He resumed treatment in October, 1943. At present, he is free from symptoms and his corrected vision is still 20/12.

Case 3. Mrs. M. B. now age 35 was first seen on January 31, 1938. She had had 7 attacks of iritis in her right eye during 9 years. The left eye had never been involved. She had been studied at the Mayo Clinic and found negative. Two years before a tonsillectomy had been done and several teeth extracted. For one year she had been getting tuberculin injections and omradin. She had taken typhoid intravenously during her attacks. The present attack began 7 days before. It came on following mud baths taken at a Wisconsin Hotel. She had been given typhoid intravenously, 3 injections of omradin and one fever treatment in an electric cabinet which left her very weak.

In December, 1932 she had urticaria of her hands, feet, neck, ears, and some mucous lesions. She had 4 to 5 attacks of angioneurotic edema in 3 years. These lasted 4 to 5 days and were always worse in the morning. In 1932 she was tested by Dr. S. M. Feinberg who found her sensitive to: dog hair, duck feathers, hog hair delayed, wheat blutein +, globulin +, Protease delayed. Spinach 3+ delayed. Tomato, mint, tea, cocoanut, pecan, apple, apricot, blackberry, cherry, cranberry, date, olive, + delayed. Cotton, flaxseed, hycopodium + delayed. Kapok, orris 2+ delayed. Silk 3+ delayed.

Fungi: Alternaria, aspergillus niger, chaetomium, epidermophyton, monilia albicans, penicillium chryogen + delayed. Tricophyton + and Bakers yeast + delayed.

In 1936 she had allergic dermatitis and with non allergic cosmetics was free until 1937.

On April 27, 1937 an intradermal test with 1/10 cc of stock dust produced tremendous edema of arm and forearm.

Dr. Tumpeer prepared a solution from her own house dust and she began treatment by Dr. M. Dorne on May 18, 1937. He began with 1:1000 dilution. She had been taking these until one month ago and had been free from symptoms for several months until she took the mud bath one week ago.

Examination revealed:

RV=20/200 —0.25 —1.00 c 180 = 20/100

LV=20/200 —3.50 —0.50 c 180 = 20/20

L.E. was normal. R.E. there was a ++ ciliary injection. There was a triangular area of K.P., in the lower 1/3 of the cornea and a faint dust-like deposit in the upper ½. There were many cells in the aqueous. The pupil measured 6.5 mm and was slightly eccentric to the nasal side. There was a brown posterior synechia at 7:30, and many granular brown dots on the lens capsule. There was a small gray node at 2:45. The tension was normal. There were a few granular dotes in the vitreous. The fundus was normal. The acute attack was treated with heat, atrophine and calcium gluconate. The attack had subsided by March 21, 1938. She continued with injections from February 22, 1938 (1:1000,000 dilution) until December 10, 1938. In November, 1939, and May, 1940, she appeared with a mild follicular conjunctivitis. She was seen on September 18, 1939 and the only findings were two tiny gray nodes on the pupil border at 5:45 and 7:45. A new antigen was prepared and she was treated from April, 1939 to December, 1939.

During January and February she was in a dust storm in Texas and had a slight conjunctivitis.

On February 12, 1941 she had a slight ciliary and conjunctival injection but no intra-ocular findings. This attack of conjunctivitis was traced to pigs hair stuffing in a new chair and disappeared in 2 days, after removal of the chair.

When last seen the corrected vision was R 20/20 —1 and there were two small syneachiae at 7 and 8 o'clock. She has had no signs of iritis since the disappearance of the quiet nodes in September, 1939.

Case 4. T. J. aged 58 years never had any eye trouble until June, 1943, when a lot of dust blew into his right eye. On July 9, he developed pain, redness and blurring in that eye. He consulted a doctor 1 week later.

When first seen on July 20, 1943, RV was hand motion at 1 foot, LV=20/40. The left eye was normal. The right eye had very marked ciliary injection. The cornea had a grayish reflex. Its entire posterior surface was covered with a sheet of fine precipitates. There was a cyst like exudate filling ¾ of the anterior

chamber and an almost complete annular posterior synechia. There was a faint red reflex. Fundus details could not be seen. The pupil measured 4.5 mm. The globe was soft. Ten percent neosynepherin dilated the pupil to 6 mm. A complete focal infection study with x-ray and laboratory check up was negative. The patient was treated with Typhoid Vaccine intravenously, aspirin, heat, atropine, and epinephrine bitartrate. By September 8, 1943 the eye had cleared. The pupil was 5.5 mm with synechia in the nasal ½. The anterior lens capsule had a thin film over it. The disk, and macula were normal. The vision was 20/70.

He returned on September 11, stating that he had had a head cold with no temperature and the eye became red. There was considerable exudate in the anterior chamber and many large K.P. He was hospitalized and again given Typhoid intravenously. By October 29, 1943, the eye was quiet and the vision returned to 20/70. On November 8, 1943 he returned with a red, painful eye. He had been accidentally struck in the eye by his small grandson. There was lid edema, 3+ ciliary injection. Dense K.P. — much exudate in the anterior chamber and a wide creamy exudate at 10 o'clock. There was no red reflex and the pupil was 3.5 mm. in diameter. The pupil was dilated to 6.5 mm. and the patient hospitalized for fever therapy. The condition cleared and the eye was quiet on November 26, 1943.

He returned November 30, 1943 with marked redness, much exudate, many K.P. He was again hospitalized for fever therapy and on dismissal sent for allergic study. During this period he received 10 injections of 2.5 cc. of proteolac and the atropine, heat and aspirin.

Dr. B. Z. Rappaport reported the patient sensitive to the following:

MOLDS: Yeast, hormodendrum, penicillium, helminthosporium.

INHALANT SUBSTANCES: Tobacco (slight reaction).

FOODS: Oats, banana, carrot, celery, dill, eggplant, peppers, tomato, honeydew melon, watermelon, endive.

By January 18, 1944 the eye was quiet. There were a few granular dot opacities in Bowman's membrane in the lower ½ of the cornea and a faint sheet of granular posterior precipitates. The pupil measured 5 mm. and had a posterior synechiae between 2 and 4 o'clock. The eye was soft. There was granular brown dust on the lens capsule. The lens was more clouded. The best vision was 20/70. He has avoided beer and tobacco and begun therapy with molds and continued since December 13, 1943 and when seen on April 28, 1944 had remained free from symptoms. He has gotten only 30 injections (2 times per week) and since February 4, 1944 one per week.

Case 5. Mrs. A. M. O. aged 39 had her first attack of iritis in her left eye on July 2, 1922. She was under the care of Dr. John Evans in Brooklyn, who wrote that "her R. vision was 6/42, L 6/4. The attack was severe. She had synechia at 6 o'clock with many corneal precipitates. Focal infection study revealed diseased tonsils and teeth. She had extractions on July 17 and the eye became red the following day. Extractions on July 22, were followed in 5 hours by redness of the eye. She was last seen on July 27."

She consulted Dr. T. D. Allen in Chicago on August 11, 1922. R. vision was 20/200 during a severe attack in the right eye. She moved to Detroit and was under the care of Dr. W. R. Parker in August, 1922. The iritis was subacute. There was ciliary injection and a posterior synechia at 9 o'clock. There was some pigment on the lens capsule. The fundus was normal. She became sensitive to atropine. RV 6/5. LV 6/3. In May, 1923 the eye was quiet and RV 6/4.

On July 1, 1930 she was seen at University of Chicago Eye Clinic. She had had an attack of iritis every other year since 1922. These lasted for about a month. The last attack was one year ago. At present there was pain, lacrimation, redness and blurred vision. She had a complete study for focal infections which were negative except for a left external otitis. Streptococcus viridens was isolated and a vaccine prepared. She gave a very strongly positive reaction to a skin test and was given a course of injections.

On December 30, 1930 there were infiltrates on the limbus of the R cornea at 6, 7 and 8 o'clock. On June 12, 1931 she had a focal reaction in the right eye after an injection of vaccine. On January 19, 1931 she had a sore throat with slight discharge from left ear. On March 31, 1931 there was a definite recurrent attack of right iritis following 36 hours after a vaccine injection. On December 15, 1931 the first attack of left iritis appeared. She was given a course of tuberculin protein up to 1:100 dilution. She had acute attacks in the right eye in February, April and May, 1932 and was hospitalized and given typhoid vaccine and calcium gluconate. Focal study was repeated and found negative.

Allergic tests revealed that the patient was sensitive to squash, spinach, cocoanut, coffee, peanut, cotton seed, pepper, buckwheat, corn, rice, chicken, salmon, plum, strawberry, watermelon, lima beans, beets, cabbage, celery and onions.

She continued to have attacks at frequent intervals in one or both eyes and was only free from symptoms for 9 months in 1938 and during 1940.

On February 27, 1934 she had a focal infection study by Dr. E. E. Irons who found only x-ray evidence of sinus infection and sent her to Dr. Geo. Shambaugh, Jr., for treatment. She was being treated with sodium thiosulphate, and typhoid vaccine intravenously and salicylates during the acute attacks during all this time.

On December 22, 1932 the right cornea had 24 tiny subepithelial infiltrates. By January, 1933 these cleared.

In May, 1941 she consulted Dr. B. Z. Rappaport who found

POLLENS: (June-July) timothy, red top, orchard grass, June grass. (August-September) giant ragweed, short ragweed.

MOLDS: Marked reactions to: penicillium, alternaria, aspergillus, monilia.

ENVIRONMENTAL SUBSTANCES: Kapok, wool, silk, feathers, pyrethrum (insecticide), tobacco, glue.

FOODS: Definite positive reactions to: date, fig, hops, rhubarb, walnut, beet, almond, pea, grape, cocoa, sweet potato, cinnamon.

Questionable reactions to: wheat, pineapple, carrot, celery, dill, lamb.

Delayed reactions (occurring after twenty-four hours) to: grapefruit, orange, tangerine, pistachio nut, parsley, parsnip, blueberry, cranberry, tomato, cucumber, pumpkin, American cheese.

In addition, there were delayed reactions to all the fish.

She continued to live on a farm where the environmental substances were not controlled and she was not omitting many of the foods she reacted to. She had injections for molds and grass pollens between June, 1941 and October, 1942. The eyes flared up several times during the course of the treatment. She only tolerated 1/10 the average dose of molds.

On February 26, 1943, she had a mild right episcleritis but no iritis which lasted 3 days. On October 26, 1943 she had a severe attack of left iritis with a mild optic neuritis and went to the Mayo Clinic. She had a focal infection study which was negative. During this attack both eyes were involved with iritis. She returned to Dr. Rappaport and has resumed treatment and has continued to date.

On November 23 and 24 she cleaned two dusty rooms and reported on November 26 with left keratitis — 6 infiltrates were seen in the center of the cornea.

When last seen on December 20, 1943, the right vision was 20/15, left 20/15 —2. The pupils were dilated to 7.5 mm. with scopolamine. The right had posterior synechiae at 5 and 7 o'clock. The left had adhesions at 6 and 8:30 o'clock. There were fine dust precipitates on the posterior cornea and very few cells were seen in the aqueous of each eye.

She has been free from any symptoms for the past 5 months.

Case 6. Mrs. M. L. B. aged 34, was seen first on May 31, 1939 at Billings Hospital.

She had had chronic iritis of both eyes for 14 years.

These occurred once or twice annually for 8 years. Attacks begin with itching, eyes become red, painful, and vision becomes blurred. They usually last 6 weeks. She had a tonsillectomy 6 years before and had a discharging ear treated as well as an abscessed tooth removed. Following house cleaning a few day ago — right eye became red and itched. RV=20/25 —1, LV=20/15 +2. Right eye was 2+ injected. The anterior chamber on lower 3/5 was filled with a brownish exudate. The iris vessels were enlarged. The disk veins were engorged. The left eye was quiet. There were pigment dots on the lens capsule.

By June 10, 1939 the eye was quiet. The right iris was brownish, left blue.

Focal infection study was negative. She reacted to 1:1,000 tuberculin and was given a course of O.T. injections.

On December 2, 1939 the eyes became red but no iritis appeared. She has noted that the eyes frequently become red on Friday night. She returned April 12, 1941. From April, 1940 to January, 1941, eyes were fine. From mid January to present, the right eye was blurred and red; the left eye for past month. She was getting auto hemolytic staphylococcus vaccine and typhoid vaccine at the allergy clinic. She used atropine and heat. There were fine K.P. in both eyes. There were many cells in the aqueous and engorgement of the right iris blood vessels.

She was given sulfanilamide until April 26, 1941 and given a series of proteolac injections until May 27, 1941.

July 5, 1941 RV=20/70, LV=20/20 +. Pupils R 5.5, L 4.5 mm. with much pigment on less capsules.

August 26, 1941 there was injection of both eyes, and many cells in the aqueous. Arythrityl tetranitrate 30 mgm. b.i.d. was used.

September 13, 1941 right pupil 3.5, left 6 mm.; No synechiae.

December 20, 1941 RV=20/15, LV=20/15 +. She had had one attack 5 weeks before which lasted two weeks. There was a synechia from 4 to 7 o'clock and many cells in the aqueous.

February 24, 1942 RV=20/13, LV=20/13 +. Only conjunctival injection. Physical examination, laboratory and x-ray examinations were negative. Allergy tests showed reaction to house dust, horse dander, cat hair, chicken feathers, alternaria, beans, cocoa, cottonseed, Fleishmans and Brewers yeast, hemolytic staphylococcus vaccine, lobster, salmon. She did not have a complete testing so that foods and environment substances were not eliminated.

She received a course of treatment with hemolytic staphylococcus from her naso-pharynx and auto dust and typhoid vaccine until April 15, 1941.

She consulted Dr. B. Z. Rappaport on November 6, 1941 who reported her sensitive to

POLLENS: (April-May) cottonwood, box elder, oak. (June-July) timothy, red top, orchard grass, June grass. (August-September) giant ragweed, short ragweed.

MOLDS: Hormodendrum, penicillium, alternaria, aspergillus, mucor.

ENVIRONMENTAL SUBSTANCES: Wool, feathers, dog hair, goat hair (Mohair), hog hair, (Ozite), cow hair, (Ozite).

FOODS: Oats, rice, banana, ginger, fig, beet, brussel sprouts, horseradish, radish, turnip, blackberry, navy bean, pear, tunafish.

She has not been seen since February, 1942.

SUMMARY

Six cases of iritis in which all foci of infections had been cleaned up continued to have attacks. They were tested for allergy. All of them proved to be highly allergic. All gave positive skin reactions to molds and various foods. Three

were allergic to pollens and 5 to various environmental substances.

TABLE 1

Case No.	Age	Sex	No. of Years Iritis	Molds	Pollens	Environmental Sub- Foods	stances
1	36	F	16	5	6	4	5
2	38	M	26	3	0	11	0
3	35	F	15	8	0	16	9
4	58	M	1	4	0	11	1
5	39	F	22	4	6	24	7
6	29	F	16	5	10	14	6

It is interesting to note that in all cases, there was at various times involvement of the corneae with small superficial infiltrates. Some of these attacks involved the anterior stroma and left scars. All returned at different times when they thought the iritis had recurred but only conjunctivitis was present. In two cases, there was mild episcleritis. Case 1 had small circumpappillary hemorrhages and many chalazion. Case 5 had a mild optic neuritis with one attack.

Two patients had attacks of conjunctivitis, one with a keratitis and a mild recurrence of iritis, following house cleaning when they were exposed to much dust. Another had an attack of conjunctivitis only, following a dust storm and severe iritis after a mud bath. She had a severe conjunctivitis when exposed to the pig hair upholstery in new chair which subsided 2 days after removal of the chair. In case 4, the onset of the iritis followed an episode in which dust was blown into his eyes.

One patient (Case 6) who is a catholic and is sensitive to fish, noted that her eyes frequently became red on Friday night. In case 4, the patient sensitive to Brewers yeast and tobacco has pain, irritation and blurring of vision when he drank beer or smoked cigarettes.

It is of interest to note that tiny gray nodes, commonly called tubercles in many descriptions of iritis, were present at times in three cases of this series.

COMMENT

Anaphylaxis as shown by serum sickness is accepted as a clinical manifestation of allergy. The eye does participate in such seizures. Theodore and Lewson reported bilateral iritis with serum sickness in 1939. We[12] reported a case of pre-retinal hemorrhage with serum sickness in 1940.

The experimental work cited before confirms the clinical observations.

Clinical demonstrations in other forms of ocular allergy than iritis are common. Because of the danger to vision and the pain which accompanies iritis we have hesitated to try it in these cases. One patient not reported in this series, because he has not been tested did have 2 attacks of iritis following the eating of turkey and another had an attack of keratitis followed by a mild iritis after eating 2 bags of peanuts.

Patients with conjunctivitis and episcleritis were told to eat the offending food and produced recurrences. One patient on 3 occasions produced an attack of episcleritis after eating pork. Another patient produced a recurrence of her scleritis 6 hours after smelling a jar of fruit from which she had just removed a layer of mold. Another with keratitis had an attack 4 hours after cleaning up a damp basement. Both of these cases gave skin reactions to molds.

TREATMENT

Thus far the only case fully cooperative in treatment for his allergy is No. 4, whose iritis is only of 11 months duration. Case 1 has started treatment very recently, Case 2 had inadequate treatment interrupted by army service but is again on adequate treatment. Case 5 has resumed treatment since the scare of the last bilateral attack of iritis.

It is much too early to know what results to expect from treatment in these cases. Case No. 3 who has had only auto dust injections and avoided food and environmental substances has been free from attacks of iritis for 6 years, though she has had conjunctivitis several times during 1938 to 1940. These have not recurred in 4 years.

CONCLUSIONS

Six cases of iritis in which elimination of all foci of infection have not prevented recurrences have been prsented.

All have been found to be definitely allergic to molds and certain foods; 5 to environmental substances and 3 to pollens.

We do not believe that we have stumbled on highly allergic patients with iritis, but rather that allergy plays a very definite role in the etiology of iritis.

This series is presented in the hope that it will stimulate others to investigate the allergic etiology of iritis.

BIBLIOGRAPHY

1. Roch, M.: "Migraine emblyopique avec floculation des milieux oculaires," Presse med. 45: 199-200, Feb. 6, 1937.
2. Parry, T. G. Wynne: "Ocular Reaction to Foreign Protein," Brit. M. J. 2: 396-397, Aug. 19, 1939.
3. Kennedy, Foster: "Cerebral Symptoms Induced by Angioneurotic Edema." Arch. Neurol. & Psychiat. 15: 28-33, January, 1926.
4. Bruckner, R.: "Ueber ein bisher nicht beschriebenes oculares Symptom bei Migraine," Ophthalmalogica 101: 91-95, February, 1941.
5. Wood, D. J.: "Inflammatory Disease in Eye Caused by Gout," Brit. J. Ophth. 20: 510-519, September, 1936.
6. Bothman, L.: 1941 Year Book of The Eye, Ear, Nose & Throat, P. 7-58.
7. Woods, A. C.: "Ocular Anaphylaxis. V. Experimental Irido-Cyclitis," Arch. Ophth. 47: 162-172, 1918.
8. Dodd, H. & Rados, A.: "Versuche iber Sympathishe Spezifische und unspezifische Sensibilisierung." Ztschr. f. Immunitatsforsch u. exper. Therapic 20: 273-291, 1916.
9. Riehm, W.: Arch f. Ophth. 123: 361-426, 1940.
10. Iga, F.: Klin. Monatsbl f. Augenh. 84: 449-478.
11. Theodore, F. H. & Lewson, A. C.: "Bilateral Iritis Complicating Serum Sickness," Arch. Ophth. 21: 828-832, 1939.
12. Bothman, L.: "Pre-Retinal Hemorrhage Following injection of Anti Tetanic Serum," 1940 Year Book of The Eye, Ear, Nose & Throat.

DISCUSSION

Dr. B. Z. Rappaport, Chicago: I want to mention very briefly a few observations from the standpoint of the allergist. In the first place you will remember that these cases are selected for me. I do not see other cases of iritis, and those I do see are referred to me by an ophthalmologist who has done everything possible to rule out all foci of infection; almost all have had tuberculin treatment, typhoid, vaccine subcutaneously and intravenously. Other methods have failed, and you might say, then, that these are the difficult cases that do not respond to ordinary methods of treatment. In addition to the cases referred by Dr. Bothman I have seen 3 cases that had been studied by other ophthalmologists. I have had an opportunity to observe these for six years, so I have had some experience — if you can call 3 cases experience.

In one of these cases there was marked exudation in the anterior chamber for at least a year, with repeated attacks, almost constant before the patient was referred. We assume that there is such a thing as iritis of serum sickness. What have we to indicate that they are on an allergic basis? In the first place, the history. Ignore the skin tests; we do not know what they mean in all cases. Most of the cases react to pollens during the period from June to September; they react to molds which are present ten months of the year, so you can see they have freedom for only the cold months, and are practically all-year cases. That is true of the pollen and mold cases. I doubt very much whether food plays any clinical role in these cases. The history they give must fit in with what they react to. One patient may say — "I am all right as long as I stay out of the basement." She develops itching of the eyes and typical attacks of pain whenever she has been in the basement. The basement is damp and the excessive amount of mold precipitates the attack. Positive skin reactions are obtained in these cases to molds and pollens and other things. I think the most important molds and pollens do not give very good skin reactions — by scratch tests you would have negative reactions. By intradermal tests you have strong reactions, systemic reactions, and if you give an overdose, you have eye symptoms.

The therapeutic results are the same as in any allergic condition. You do not talk of a cure until you have had the patient under observation for a good many years, but relief for a period of at least two and a half years has definitely been established. These cases are usually unilateral, or more marked on one side than the other. Why this is so, I do not know.

Dr. Thomas D. Allen, Chicago: I feel that Dr. Bothman has given us a very fine presentation of the subject of allergy in its relation to ophthalmology. My attention was first called to the possibility of allergic manifestations in the eye a good many years ago, when I was an assistant to Dr. Wilder. He had a patient, a young women from downstate, who had a rather severe conjunctivitis that to me was so characteristic of trachoma that I wondered at Dr. Wilder's hesitancy in making the diagnosis. He persisted, however, in his assertion that it was not trachoma. By accident she fell into the hands of Dr. Kessler, who was investigating various types of allergy, and he found that the chronic cough from which she had suffered for many years was much relieved when tomatoes were removed from her diet. Her skin tests were positive for tomatoes and she was very fond of this food. Some time later she called to see us and at that time her eyelids were perfectly normal. She said that within 24 hours after eating tomatoes the previous symptoms of conjunctivitis always recurred.

More recently, Mr. H. L. has had renewed evidence of the fact that certain allergies cause iritis and an associated hypertension. He had been a patient of several internists at Presbyterian Hospital for many years, with symptoms and signs of gastric ulcer. At those times he was wont to come to our office on an average of two or three times a month, with chronic conjunctivitis and, occasionally, iritis. He was hospitalized on several occasions for the iritis.

In 1938 it occurred to me that allergy might play a role in the situation, so I sent him to Dr. Huber. He was having a little ragweed hayfever and in the hayfever season his gastrointestinal symptoms were always worse. Dr. Huber found him quite sensitive to oranges, apples, cucumbers, mushrooms and ginger. He was extraordinarily fond of gingerale and apple pie, and when these were removed from his diet he became so free of symptoms that I did not see him for a year and a half. Subsequently, he occasionally had attacks of hives and blurring of vision and aching of the eyes. This seemed to disappear when he stopped taking barbiturates, and whenever he tried out barbiturates he found they always resulted in his having hives, frequently a red eye with blurred vision, serous cyclitis, and tension up to 40 and occasionally more. A

few days ago he reacted rather markedly to a very small hayfever injection, which produced another flare-up of serous cyclitis and hypertension within less than 24 hours.

May I ask the author if he is inclined to think that chalazia are suggestive of allergy? Also, does he think that calcium gluconate is of more use in iritis of allergic origin than in the usually infectious types? And before giving milk hypodermically as a foreign protein, should we test for milk allergy?

Dr. Louis Bothman, Chicago (closing): In reply to Dr. Allen, chalazia have been reported as due to allergy. Ruedemann has reported several cases, I believe. Whether calcium gluconate is better in these cases I do not know. I do not think it makes any difference. So far as milk injections are concerned, I do not think sensitivity to it need be considered. We are not giving milk any more.

I do not agree with Dr. Rappaport entirely about food not being the cause of allergic attacks. One patient he has not seen yet gives a history of being sensitive to turkey. I thought at first he would be only sensitive to molds. Of course focal infection was ruled out. He came in about the 10th of December with the history that on Thanksgiving he had had turkey for dinner. On Friday he had a red eye which lasted about two days. The following week end he had turkey at home and on the second day the left eye became red. The following Thursday he had a turkey sandwich for lunch and came in to see me with a real attack of Left iritis. I am certain that he is allergic to other things, also molds and perhaps pollens, but I am also certain that we will find he is allergic to food.

UROLOGIC NEUROSIS AND PYSCHOSES

C. Otis Ritch, B.S., M.D., F.A.C.S.
Attending Urologist Illinois Masonic Hospital
CHICAGO

Scant, if any, attention has been paid to the urologic manifestations in the emotional phenomena of neurotic and psychotic states. Other than impotency nothing of this character seems to be generally known. Even here attention to a concomitat prostatitis, so very common in the adult male, frequently simplifies the management and hastens recovery, the patient responding more readily to physical and psychic therapy than to the latter alone. Indeed, the most satisfactory results generally ensue in those treated jointly by urologist and psychiatrist working as a team. A handicap has been rather noticable in this particular. The well-to-do patients have been no problem. Patients of moderate means — who predominate in our population — are too often handicapped by being able to report for consultation at their own convenience, thus, seeking the psychiatrist at most inopportune times and when ample time cannot be given them. A diagnosis and the admonition that it is "only in your head" has to suffice.

Urologic manifestations of psychic states are most prodigious and their ramifications almost beyond belief, whether present in Alvarez's constitutional inadequacy or Hunner's elusive ulcer.

A few case histories high lighting pertinant facts only, will develope and illustrate those points we have in mind.

Case 1 — In 1937 a young unmarried woman of 32 years consulted her gynecologist. Her principal symptom, among others, was an acute urinary retention. She was admitted to the hospital and a thorough urologic study carried out and even repeated without finding any abnormalities. The period of retention was followed by complete incontinence. Her history revealed that she continued a lucrative position throughout the economic depression during which she maintained her sweetheart who was out of work. He recently secured a position in another city and a new sweetheart. This individual was prevailed upon to return to the city temporarily at least, when the patient's symptoms ceased abruptly.

Case 2 — A busy surgeon's secretary, unmarried aged 31, history of two abdominal operations and several cauterizations and curettages. Because of fatigue and many aches a diagnostician had recently made a diagnosis of an inadequate circulatory tree and hypoadrenalism when she was referred to me complaining, in addition to the general symptoms, of frequency and pain in the bladder, on occasions severe. Complete and repeated urologic study failed to reveal a causative factor for these complaints. Another urologist was asked in consultation. In spite of a perfectly normal cystoscopic picture and a bladder capacity of 700 c.c. he thought she had an interstitial cystitis (Hunner ulcer) and advised over distension. This was of no avail. Because of the previous roentengen evidence that an adherent coil of intestine prevented distension of the dome of the bladder I recommended a laporatomy to free the intestine and bladder from adhesions. This proved without benefit and I asked her to put herself under the care of the second urologist. After some preliminary skirmishing he repeated the laparotomy for fibrosis. Later she consulted Dr. Walter C. Alvarez who I understand, was so fascinated by so typical case of what he calls constitutional inadequacy he, after concluding his examination took her to the station and bought her ticket home. An explanation of the urinary complaints: — the patient had several brothers and sisters all of whom were happily married and rais-

From the Division Of Urology, Department Of Surgery, University of Illinois College of Medicine, Chicago, Illinois.

ing families while she felt the responsibility of taking care of an invalid mother.

Case 3 — An unusually virile type of man aged 44, married about two and one-half years and a father of a two month old baby reported for relief from impotency. He had a mild prostatitis of little significance. After several visits he was asked to consult a psychiatrist. This he refused saying he could analyze a situation himself if I would give him an inkling of what I had in mind. He was reminded he was notably a man's man, could hold his own over the bar and in lusty living with the best but did not have the same attitude toward his spouse that he had toward his former paramours. A short time later he returned to impart the information that he had recovered and his wife was again pregnant. He volunteered the information that formerly he had placed his wife on a pedestal, above mundane things.

Case 4 — A naval officer, aged 33, referred when transferred from the East coast. He complained of a urethral discharge, itching, burning sensation in the urethra, a mild impotency and "soft spot" at the penoscrotal junction during erection which acted pretty much like a hinge. He had received rather continuous treatment for 3 or 4 years consisting mostly of virgorous massage and silver nitrate instillations with an occassional resection of the vera or cauterization of the posterior urethra. He had a mild degree of prostatitis. Particular attention was paid to gentleness in his treatment. After a couple of months his organic lesions and somatic symptoms were quite mild when psychotherapy was started. A fortnight later, when he was transferred to another city he was practically well.

Case 5 — A man aged 44 says that 7 years ago he developed an acute urinary retention, for which a prostatic resection was done. He continued to have a very annoying pain in the urethra. He changed urologists in 1942 and had a couple more resections performed, besides perineal radium implantation into the prostate. Experiencing no relief from much straining, difficulty, frequency and pain he was recently advised to have a bilateral orchiectomy. Soon afterward he consulted me. His prostate was somewhat enlarged and irregular and rubbery in consistency. Definitely not suggesting malignancy. At the apex of the prostate and probably loosely connected with it was a small pea sized mass, not unduly firm. Cystoscopic examination revealed no trabeculation or other signs of bladder-neck obstruction. He was referred for a thorough diagnostic study and reported as being a highly nervous and emotionally unstable individual with a pronounced spastic colitis. He has improved considerably from gentle, patient and persevering treatment directed at the colitis and prostatitis.

Case 6 — A young unmarried woman aged 28, referred because of pain in the bladder, day frequency every 30 minutes, and a night frequency every hour. These symptoms developed 6 weeks following an abdominal hysterectomy. A painstaking urologic study was performed and repeated; both appeared normal. In delving into her history it was learned she was anxious to talk about an impending separation and divorce between her parents and a tentative diagnosis of tuberculosis in her young 14 year old brother. She was easily relieved of her urinary symptoms.

Case 7 — A 49 year old male, separated, had for several years been treated rather heroically for a prostatitis. Sounds and dilators had been used with an occasional resection of the vera or epididimis or electrical coagulation of the posterior urethra. When first seen by me he had also developed an impotency, besides numerous complaints centered around his mid section. A simple condition converted, by too drastic treatment, into a complex one quite difficult to cure, physically and mentally.

Case 8 — Another young woman, aged 27, who also had undergone multiple laparotomies, reported for relief of pain in L.L.Q. and the epigastrium, vomiting and urinary pain and frequency. Nothing of consequence could be demonstrated on a painstaking urologic study. A solution to the problem was found in a domineering mother, who had recently forced the daughter to break off her engagement to get married. The mother so dominated the daughter that the latter would glance at the mother for permission to give details of her history during the interview.

These cases are representative of a large class. A different interpretation might be placed on the signs, symptoms and findings of these individuals but, surely a veritable army of them seek relief daily. A goodly part of the office practice of many urologists can be placed in this category. And with the many cases of battle fatigue or fatigue neuroses being returned to civilian life, the number of these people who consult the urologist will be greatly increased.

55 East Washington Street

One out of four people do not know that tuberculosis is contagious, and but one out of five think that cancer is communicable. There is an everlasting need to make people better informed. As Raymond Clapper said "Never over-estimate the people's knowledge, nor underestimate their intelligence." George Gallup, Channels, July-Aug. 1945.

Case finding among symtomatic patients cannot be expected to result in a majority of those patients being discovered at a minimal stage; and contact examination among associates of diagnosed patients, although yielding a high proportion of early cases, is limited in its scope, especially among urban residents. Mass roentgenography would appear to be needed if substantial reduction of cases which are advanced at the time of discovery is to be achieved. Berwyn F. Mattison, M.D., Amer. Jour. P. H., Nov. 1944.

THERAPEUTIC TECHNIQUES USED WITH A SPECIAL GROUP OF DISTURBED CHILDREN

ERWIN ANGRES, M.D.
Institute for Juvenile Research
CHICAGO

The problem children mentioned in the title are patients of the Illinois Neuropsychiatric Institute, Chicago, under the management of the Institute for Juvenile Research. They are a small group of ten to fourteen children between the ages of five and ten years, boys and girls. All kinds of psychiatric disturbances are represented ranging from isolated neurotic manifestations to almost complete psychotic disorganization of the personality, from rather mild behavior difficulties, to persistent, violent and destructive behavior.

A variety of psychiatric techniques have been employed. Play techniques with the younger child and interviews with the older child are used for exploration and therapeutic purposes. Techniques approaching orthodox psychoanalysis are especially useful in emotional disturbances of traumatic origin. Group management has value for the hyperactive or withdrawn child. Effective educational techniques are employed for the intellectually inhibited child. These various techniques are coordinated into a total program. They are employed singly or combined as need indicates.

These techniques are familar to most of you since they are employed with disturbed children in clinical contacts. Different problems are presented to the therapists when children are hospitalized and under continuous care. It is these problems we wish to discuss.

The emotional difficulties of these children have been so intense as to resist any kind of out-patient management. They live on the ward from several months to over a year. Our first problem is to provide an environment which approximates, as closely as possible, that of a family, and a healthy atmosphere in which the child can grow.

We assume that damaging influences of the original parental set-up contributed to the child's disturbance. Therefore, we are not surprised to see frequently that the child's severe symptoms disappear upon admission to the ward. The elimination of the disturbing and provoking influences of the old constellation, as well as the distraction of the patient from his preoccupations, because of the effort towards orientation in the new environment, makes even a less benign placement appear of at least temporary therapeutic value. This change in the morbid pattern can often be noticed in children so disorganized and so detached as to be called psychotic. We recognize that any institutional placement has inherent disadvantages. With five nurses, four attendants, two recreational workers, two educational therapists, all of the female sex, there are many mothers. Only the psychiatrist and, occasionally, one attendant represent the paternal side.

At the same time the child suddenly is exposed to a great number of rivals. The competitive child, especially, will suffer a great deal of initial annoyance. Since a large number of adults are available, the child soon obtains and enjoys adequate individual attention. And, further, he selects the significant adult to fill the parental role.

As a development of his adjustment to these parental surrogates, the child tries to re-establish his human environment. This can be attributed to the secondary gratification he gained from his disturbed behavior in the past.

It is during this vital period that the psychiatric teamwork of the persons in charge has to withstand the crucial test. Here, we may encounter the most overwhelming difficulties. The psychiatric orientation of the adults does not necessarily protect them from unhealthy involvements, considering that there are differences in the adults, according to personality needs and the degree of psychological insight. We find that the child does not distinguish between the trained physician, the nurse, the psychologist, or the attendant. The child, in spite of his marked recognition of authority, will attach himself to the person who comes to have the most significance to him (and often the elevator operator and the kitchen maid will have to be considered an appreciable part of the adult environment). It is rather easy for a well-trained therapist to retain the therapeutic intent and benevolent detachment, through occasional visits with the

Presented before the Physicians' Association, Department of Public Welfare, State of Illinois, 104th Annual Meeting Illinois State Medical Society, Chicago, May 16, 1944.

child in a clinic. As the therapist is exposed to the child in a continuous relationship, however, the personal needs and involvements of the therapist are very likely to offer an obstruction. It is surprising to see how successful the child on the ward is in re-establishing an original pattern of competition between the parental figures, how skillful in arousing unhealthy ambitions in the therapeutic persons, and in manipulating the adults into punitive situations, and then playing havoc with the subsequent feelings of guilt in the adult. The child may play one adult against the other in order to arouse anxieties similar to the emotional reaction he aroused in the parents by provocative and aggresive behavior, or at times, by regressive behavior. It is rather pitiful to see how a well-trained person gradually may lose his perspective because of his involvement in a situation of attachment or rejection caused by his own emotional difficulties.

In order to prevent and to handle these difficulties, much work has to be done with the various persons who work with the children. Daily conferences are held in which all the therapists participate, during which they express and formulate their opinions and ventilate their feelings. The therapist confronted with the special difficulty, is reassured. Important material elicited from the child during therapeutic interviews or observed in some significant situation, may be discussed. We may decide that a consistent, firm and limiting attitude should be maintained towards one child by all the adults. Or, we may agree on special indulgence and permissiveness. Or, again, we may decide that the nurse will punish the child, while the psychiatrist will deal with the anxiety resulting from the prohibition. There is often much controversy but the therapeutic value of these discussions can not be overestimated. It is dramatic to see how the ventilation of the adults' feelings, and their understanding of the dynamics of the child's disturbance brings about a sudden change in the child's behavior. For instance: two little boys of about eight years of age, who under the permissive and tolerant attitude of the ward, had given up their pattern of violent temper tantrums, stealing and running away, developed a very persistant nocturnal enuresis. Their wetting did not respond to the usual management, and had become an annoyance to the nurses. After it was recognized by the adults as a more infantile and innocent expression of aggression, the boys reacted to the changed attitude of the ward personnel with an almost instantaneous disappearance of the enuresis. The anxiety of the ward personnel caused by the child's attempt to intimidate the adults and arouse their guilt by producing physical symptoms, has to be carefully discussed, especially with any new person on the ward.

It is usually very hard to show a relaxed attitude towards a child who starves himself, and still not convey to the child the impression of indifference and neglect. Much more tense is the situation we encounter when a child acquires symptoms such as retention of urine or feces over an alarming period of time; especially in people entrusted with the medical responsibility, the tendency to interfere physically or pharmaceutically is great, thus reinstating the reaction pattern of the parents. In every case, however, an unconcerned attitude with an attempt of reassuring the child as to the adult's warm feeling toward him, relieves the symptoms without any apparent damage to the child's health. It is of paramount importance that we ourselves feel secure about having gratified the child's primary emotional needs before we may show disregard for his neurotic manifestations. Granted our feeling of security in having gratified the child's needs, we may go even one step further and be prohibitive with aggressive physical symptoms.

In addition, the adult's tension about sexual activities exhibited by a child needs careful management. Even enlightened and tolerant adults frequently are not able to rid themselves of their anxiety about masturbatory practices. This anxiety, in turn, communicates itself to the child, increases his fear and guilt, which stimulates his autosexual pleasure-gaining tendencies. Often, there is much bewilderment and resentment on the part of the adults towards the overtly aggressive sexual behavior of the child towards the adult or towards sex play between the children. Usually, this concern can be relieved by understanding the underlying difficulties which have led to the flare-up of sexual interests. Frequently, the adult is surprised to find how readily sexual activities in a child or a group of children subside in favor of more adequate occupations.

If the unconscious seductiveness of an adult provokes a child's sexual aggression, the situation

is even more complicated. The adult's inherent fear of the child's use of sharp or dangerous appearing instruments may find its expression in the child and accidents *will* happen. If the adult can learn to feel confident about the child's ability to handle adequately a potentially dangerous object, the possibility of injury usually is negligible. The same holds true for the child's freedom in play in outdoor situations.

One of the most difficult problems for the adult is to remain patient with the hyperactive child who often develops most violent spells of rage and destructiveness. At this point, we must take account of the limits to anyone's patience. There have been instances when the extremely dirty, obscene, and aggressive behavior of a psychotic boy induced us to exchange adults in charge of him every hour. Thus, the therapists' patience was not overtaxed and the calm attitude of the adults finally succeeded in wearing down the child's aggression. It was recognized that this type of prolonged rage was steadily reinforced and continuously fed by guilt arising from the aggression. Mildly restraining management relieved the guilt and fear, and the rage had a chance to subside. It is therapeutically valuable for the therapist that after a certain number of hours, he can leave his work and return the next day relaxed and wholesomely detached (while the unfortunate parent often is exposed constantly to the child's abusive behavior and in time becomes completely helpless).

The most difficult situation arises when the therapeutic persons begin to show signs of overidentification with an individual child — often to the extent of suffering in the affectionate relationship with the child. This situation may lead to hostile competition with the child's actual parents, and tend to isolate the therapist from the therapeutic group. Here, open discussion in staff meetings will only hurt and embarrass the person involved. It is the supervising psychiatrist's job to investigate the adult's personal needs and to encourage him to bring out his feelings and to relieve his anxiety. This attempt may develop into a protracted treatment situation with the adult. (This is comparable with the techniques of collaborative psychotherapy employed with the actual parent of the child, which — as we should have mentioned before — is an essential part of our effort towards total therapy of the pathogenic situation.)

We hope that our description and enlargement of the difficulties that may arise within the therapeutic group, will not convey to you the impression that most of the persons entrusted with this work are a gorup of psychopathic individuals. In fact, it is obvious that only persons definitely endowed with understanding of children's problems, as well as with a great amount of warmth and affection for children, can persist in this very trying type of work. Any inadequate person will disappear from the staff within a more or less brief period, by an almost biological process of elimination of the unfit.

Conclusions

We may learn considerably from the observation and experience of other people in the same type of work. Still, every new establishment for the treatment of severely disturbed children will have to go through a period of severe difficulties before establishing a psychiatric teamwork and a hygienic emotional atmosphere. In order to create this, and maintain this utmost important therapeutic agent, much continuous work has to be done with the persons who work upon the child.

Discussion

Dr. Emmy Sylvester, Chicago: Dr. Angres has described some of the vicissitudes encountered by the therapeutic team which operates in an institutional setup for the psychiatric treatment of emotionally disturbed children. He has shown some of the difficulties that may arise between personnel and patients and how these difficulties are overcome successfully by direction and integration of the individual members of the therapeutic group.

His experiences confirm the impression of other workers in the field, namely that the management of interpersonal relationships is the Alpha and Omega of all dealings with human personalities. We deal with the evaluation of interpersonal relationship in its various nuances as we concern ourselves with establishing norm and deviation of earliest and later personality development; we see interpersonal relationship as the central issue in the various psychotherapeutic procedures and we are impressed with the importance of the interpersonal factor in the area of pedagogics, group-psychology and sociology.

The formative influence of the earliest interpersonal relationship, namely the relationship of the infant to his mother has recently been excellently formulated by Dr. Margaret Ribble. She describes the need for psychological mothering as one of the infant's primary hungers, of vital importance just as his need for oxygen

and food. Clinical experience has shown that the nature of this primary relationship determines the future personality structure. We have learned to derive decisive prognostic clues from our understanding of the early mother-child relationship and have seen how it determines malignancy or treatability of later emotional disease. In the process of normal maturation we see increasing independence from the original ties. The individual becomes able to turn to new objects and to establish new patterns in his interpersonal relationships that become determined by other than the original selfish aims of attaining dependent satisfaction.

We also know that under stress of any kind there arises in every individual a tendency to return to the old sources of satisfaction and to re-establish the old relationship-patterns that offered some known security, even if it was of conflictful nature.

That is why Dr. Angres' youngsters became patients and this tendency explains also why certain workers in his therapeutic team are put on the spot by certain situations that arise in their contact with the patients.

In the therapeutic approach we offer the patient a new start by providing him with one or a whole set of new interpersonal relationships which have to be different from the old pathogenic ones. These new relationships are therapeutic as they are free from the crippling and anxiety-creating influences of ambivalence and inconsistence which necessitated regression, symptom-formation and emotional illness in the patient. In this new setting the individual will recapitulate his neurotic and defensive mechanisms until the new relationships implicitly demonstrate the ineffectual uselessness of such mechanisms. Only then is the patient ready to relinquish them and to use the new security towards growth and maturation, which can manifest themselves within the leeway of the therapeutic milieu.

The maintenance of the therapeutic milieu is essential for the progress of the patient. Its atmosphere is primarily determined by the spontaniety the therapeutic agents show in their dealings with the patient, regardless whether the patient's need is for a relationship of indulging or restrictive nature. This spontaneity has to be preserved in the approach to the patient by technical, interpretive psychotherapy as well as in the *implicitly* therapeutic actions of the other members of the therapeutic team.

It is in consideration of the essential factor of spontaneity in all therapeutic actions worthy of the name that one is justified to say that all psychotherapy remains art to a large extent.

The existence of the therapeutic atmosphere with its essential factor of spontaneity is threatened whenever any member of the therapeutic team has to assume a role which touches too closely upon some unresolved personality problem of his own. With the need for defensive activity the capacity for free spontaneity is lost, regardless whether this defensive activity is manifested as identification with the patient, dislike for him, over-anxiety, over-objectivity or any other kind of reaction-formation. This substitutive behavior has always the characteristics of neurotic acting — it is more or less compulsive, less object and reality directed and self-curative rather than compatible with therapeutic intent.

The members of the therapeutic team not less than the patients are subject to unconscious motivation. Their reactions are beyond intellectual control. Therefore they can be dealt with only according to principles which account for this fact. Modification of staff-attitudes can never be achieved by explanations and interpretations on a purely intellectual level. Knowledge thus gained can be used defensively only and will hardly re-establish the free spontaneity that we found essential for any therapeutic action. Restoration of any personality function whether in staff-member or in patient can be expected only from procedures which are psychotherapeutic in as much as they utilize a specific interpersonal relationship to the aim of decreasing anxiety and increasing freedom of action. Dr. Angres has demonstrated how such a relationship is offered to the members of his staff, when he gives them an opportunity to discuss with him the problems of the patients and their own problems in dealing with them.

He has shown that the essence of therapeutic teamwork in the institutional set-up has to consist in a hierarchy of psychotherapeutic actions. This principle is not limited to the intramural situation. It holds equally true for any cooperative approach in the field of psychiatry.

STOMACH ULCER PATIENTS NEED FOOD AT NIGHT TO NEUTRALIZE ACID

Patients with ulcer of the stomach need to be fed at night to neutralize the acid present which retards healing, according to a report in the February 2 issue of *The Journal of the American Medical Association.*

David J. Sandweiss, M.D., from Detroit, Major Marcus H. Sugarman and Captain Harold M. Podolsky, of the Medical Corps, Army of the United States, and M. H. F. Friedman, Ph.D., of Philadelphia, studied gastric secretion in 38 normal persons and 29 ulcer patients at the Harper Hospital and the North End Community Fund Clinic, Detroit, Mich.

The authors conclude that although the ulcer patients have no greater volume of gastric juice at night than normal persons, the evidence indicates that they retain more of the juice and acid in their stomachs. Therefore, in order to prevent the acid from irritating the ulcer at night, feeding is essential.

Routine X-rays of patients, nurses, and other hospital employees will not only disclose unsuspected tuberculosis which is extremely important to the individual but will also protect other patients and employees from the danger of infection. As more and more states are making tuberculosis a compensable disease, this factor will become increasingly important to hospital administration. Karl H. Pfuetze, M.D., Med. Dir. and Sup't., Mineral Springs San., Cannon Falls, Minn.

Physical Medicine Abstracts

John S. Coulter, M.D.

CHRONIC LUMBAR BACKACHE

Clarence A. Spithoff, M.D., Orthopedist,
Samuel Merritt, Providence and
Alameda County Hospitals
Oakland, Calfornia

In THE AMERICAN JOURNAL OF SURGERY,
71;1;25
January 1946

This patient is placed on a program of therapy, that for simplicity in discussion will be the same for every case of this type, but which can be varied to suit individual requirements. The treatment is outlined as follows —

1. General therapy
   (a) general toning up
   (b) lumbar belt
   (c) corrective shoes
   (d) see patient frequently
2. Physical therapy
   (a) radiant heat
   (b) massage
   (c) exercises
3. Home therapy
   (a) bed boards and mattress
   (b) radiant heat or other forms
   (c) exercises

General Therapy. The weak back must not be considered a simple local problem, for many times there are general conditions which may prolong the disability. The question of adequate sleep in the prevention of fatigue, of the patient's working and living environment and of his general health, all must be considered. Some form of mild sedative or analygesic may be needed for a short period. A change of occupation or duty is sometimes also necessary.

Man, as a result of assuming the upright posture, has inherited a potentially weak structure, the lumbosacrum. This area is subject to anomalous changes and is therefore not in equilibrium. This area may be easily overburdened by poor posture, obesity, asthenia, and trauma such as slips or falls resulting in chronic low back disability. Every case should be carefully studied to rule out obvious causes of disability such as protruded intervertebral disc, infections, fracture. arthritis, anomalies, etc. Those cases which remain can be treated with gratifying results by a program such as outlined in this paper.

PERIPHERAL NERVE INJURIES IN EUROPEAN THEATER OF OPERATIONS

Management, with special reference to early nerve surgery

Colonel R. Glen Spurling, Senior Consultant in Neurosurgery, European Theater of Operations, Medical Corps, Army of the U. S.

In THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, 129;15;1014
December 8, 1945

The excellent results obtained by the peripheral nerve injury program in the European Theater of Operations were at least in part due to the expansion of the Physical Therapy Service proportionately with the neurosurgical load. The Chief Surgeon's Office cooperated fully in this respect, by the authorization of additional space and equipment, the assignment of available Army personnel in excess of Table of Organization specifications and, whenever possible, the employment of trained British civilian personnel. As a result, the Physical Therapy Service became one of the most important departments of every neurosurgical center.

Recent experiments and clinical studies have indicated that daily galvanic stimulation of de-

nervated muscles will prevent atrophy and retard fibrosis, and this measure was therefore employed as a routine in all cases, beginning with fifteen brisk contractions daily and progressing gradually to thirty contractions. When casts were used for postoperative immobilization, windows were cut over the bellies of the paralyzed muscle groups and galvanic stimulation was begun the day after operation. Other measures include massage, active and passive motion and the use of dry and moist heat as indicated. Particularly careful attention was given to the active and passive motion of small joints. Fixation by splints was kept at a minimum, detailed instruction of the patients in respect to the care of their own joints being considered more important than mechanical methods of fixation.

A routine adopted for the management of peripheral nerve injuries in the European Theater of Operations was based on fundamental surgical principles modified, as circumstances required, to bring them into accord with the exigencies of the military situation.

The essential features of the program were (1) debridement and delayed primary closure of the wound, with approximation or anchoring of the severed nerve ends if they were visualized at the first operation; (2) suture of the divided nerve within twenty-one to ninety days after wounding, but preferably between twenty-one and twenty-eight days, when the least technical difficulties and the best end results can be expected; (3) a judicious use of immobilization during transportation and after neurorrhaphy, preferably by removable splints; (4) preoperative and postoperative physical therapy.

BICIPITAL TENDOVAGINITIS

Major I. W. Kaplan and Major B. L. Hawkins
Medical Corps, Army of the United States

In THE AMERICAN JOURNAL OF SURGERY,
70;3;385
December, 1945

1. Bicipital tendovaginitis in young male adults engaged in strenuous activities is a relatively common condition and deserves more consideration in the differential diagnosis in the clinical entity that has become designated as the "painful shoulder syndrome."

2. Trauma and infection are mentioned as possible etiological factors.

3. The right shoulder is most commonly affected in right-handed individuals suggesting that the additional trauma of use may be a factor in the etiology.

4. The average age in our group of cases was thirty years.

5. Infiltration therapy has given excellent results in our series of cases presented.

6. Treatment is accompanied by relief of pain and restoration of a full range of motion at the shoulder joint.

A CRITIQUE OF THE USE OF REST IN THE PHYSICAL THERAPY OF CONVALESCENCE

Ralph Pemberton, M.D., Philadelphia

In ARCHIVES OF PHYSICAL MEDICINE,
26;11;620
October, 1945

Rest is usually prescribed to an excessive or inadequate extent. One needs but to go to homes for incurables to see exemplified the physiologic consequences of uncritically prescribed bed rest.

Conditioned Rest

1. Conditioned rest is not mere negation of activity; as such it could be harmful in many ways.

2. In rheumatoid or atrophic arthritis unconditioned rest may lead to ankylosis unless controlled.

3. Conditioned rest in most cases should include some form of physical therapy, such as postural exercise.

4. Properly conditioned rest in bed: (a) promotes passage of tissue fluids into the vascular channels; (b) promotes opening of peripheral capillaries because of warmth induced by the bed clothes; (c) promotes relief from static strains incident to maintenance of erect posture; (d) promotes relaxation of the nervous system; (e) allows ptosed organs to assume proper position and function; (f) reduces the metabolic load, and (g) permits settlement of metabolic deficiencies. It should be added that faulty posture may operate disadvantageously, even in bed, and when present needs attention and gentle measures of correction.

It is important to point out that physiologic rest may not be possible of inauguration or final

achievement without pharmacologic assistance. The excited psyche and conditioned reflexes of the state under discussion will not return to normal quickly. Elevated nervous activities are usually in part defense mechanisms and are more easily aroused than allayed. Recourse must be had to the safest of the sedative drugs, such as the bromides and phenobarbital, the latter in doses of ¼ grain three or four times a day. Such small doses may accomplish nothing unless the subject is confined to bed. Larger doses defeat their purpose and establish a new dependency, which in turn may need control.

In this connection it may be well to mention that the use of "tonic" medication often has significant value in conjunction with gentle sedation in instituting a program of conditioned rest. Many clinicians feel that the administration of strychnine or nux vomica coincidentally with the sedatives is antagonistic pharmacologic practice. This is not the case, however, provided the dose of each is small. Fatigued organs or tissues may not be able to initiate as soon as desirable the processes of repair and normal function, and there is no doubt that the use of small doses of nux vomica, such as 3 minims three times a day before meals, may greatly aid in restoring balance. The prime consideration underlying the gentle medication discussed is complete rest of the patient as a whole. Without physical and mental rest such supplementary measures are futile.

THE MANAGEMENT OF OSTEOARTHRITIS

A. R. Neligan, M.D.
Honorary Physician to the Droitwich Brine Fund, Droitwich Spa, Worcestershire

In THE BRITISH JOURNAL OF PHYSICAL MEDICINE AND INDUSTRIAL HYGIENE, 8;4;103
July-August, 1945

As to expert physical treatment, the necessity for and the intervals between courses should depend upon the stage and progress of the case. Courses of treatment give opportunities for its review and, if the patient leaves his surroundings, he gets other advantages, especially that of regulated rest.

An additional number of hostels for rheumatic patients, with a treatment centre near them in pleasant surroundings, would be a boon to the tired and aching osteoarthritic. The mass treatment of rheumatism is a big subject; it will not be made easier by the provisions of the present plan for a comprehensive health service, and we have still to learn what the late effects on the population of six years of war, and on the Forces of a winter in the Low Countries, may be. However there is no need to say more on the matter, in view of the Empire Rheumatism Council's valuable "Plan for National Action". I must apologize, however, to Lord Horder, its author, for not having noticed until after I had drafted this paper that he had quoted with approval a system of home treatment similar to the one described above. He makes the further point that home treatment would lighten the work of the treatment centres of the "Plan." It may be thought to be some justification for dealing with such elementary matters that the Mayo Clinic has found them worthy of study.

INTERNAL DERANGEMENTS OF THE KNEE

Diagnosis and Treatment

Major Bernard J. Mintz, Medical Corps, Army of the United States

In THE AMERICAN JOURNAL OF SURGERY, 70;2;196
November, 1945

1. In both initial and late cases of meniscus injury, surgery is indicated as soon as diagnosis is determined.

2. Cases with osteoarthritic changes, as evidenced by persistant symptoms and disability, are not suitable subjects for operation in military service.

3. Complete excision of the meniscus should be done in all cases. The method advocated for this purpose requires two incisions for a visual approach to both joint compartments.

4. Prognosis is generally good. Persistent symptoms postoperatively, which cannot be attributed to altered joint mechanics, knee strain or quadriceps weakness, are usually due to other coexisting pathological conditions, such as early arthritic changes (rheumatoid or osteoarthritic), chronic synovitis or chondritis.

5. Postoperative care includes early quadriceps exercises (after the third day), weight bearing and active exercises after the tenth day, and restriction of strenuous joint activity for about two months postoperatively.

Medicine and the Armed Forces

SURPLUS MEDICAL EQUIPMENT FOR VETERANS OF WORLD WAR II

A procedure has been work out whereby veteran physicians, dentists and veterinarians may purchase surplus army medical equipment directly from the disposal agency. The authority for this procedure is found in Public Law 457, 78th Congress, and appropriate regulations have been issued by the Surplus Property Administration.

In order to assist the individual in obtaining surplus property, there has been prepared by the Surgeon General of the Army, in collaboration with the disposal agency, a listing of items by army medical catalogue number, standard commodity classification number and army nomenclature, together with a price set by the disposal agency. This listing includes material appropriate for a professional office which was available as "declared surplus" in various army medical depots at the time the list was prepared. Supplemental lists are to be furnished as additional items become available. Copies of this list are being made available in service command headquarters, various army hospitals, medical depots and disposal agency offices. This listing should be used by individuals in preparing requests. It should be understood that not all of this material will be available in any one particular region, nor will the quantities of any given items be sufficient to satisfy all purchasers.

Veteran physicians, dentists or veterinarians should apply to the district office of the Smaller War Plants Corporation which is located nearest the veteran's residence. Effective January 28, district offices will be absorbed by the War Assets Corporation; however, it is expected that these district offices will remain in the same location. District offices are maintained in approximately one hundred and ten of the major cities throughout the country. The function of certifying applicants as to their eligibility to purchase surplus property, now performed by the Smaller War Plants Corporation, will be assumed by the War Assets Corporation as of January 28.

Having obtained certification that the applicant is a veteran and that the property applied for is to be used in his own small enterprise, prospective purchasers may present their requirements to the nearest regional office of the disposal agency or to the nearest district office of the War Assets Corporation, listing quantities desired by stock number and nomenclature as shown on the listing. Regional offices of the Office of Surplus Property RFC have also been absorbed by the War Assets Corporation, effective January 15, at which time the War Assets Corporation, a subsidiary of RFC, assumed the disposal functions for which the Office of Surplus Property RFC had heretofore been responsible. Regional offices are located at 209 S. La Salle St., Chicago 4.

Regional offices will advise the applicant as to items, quantity, condition, price, availability and location of material within that region. An extract, listing items desired but not available in that region, will be forwarded by the regional office to the central stock control point in Washington. Information as to availability in other regions will be furnished by the Washington office to the regional office for transmittal to the applicant. This information will also include the quantity, condition, price and location of these items. On receipt of this information, the applicant will notify the War Assets Corporation regional or district office of the items desired, forwarding certified check for the total amount involved. The disposal agency will then order shipments from the army or navy storage depot, where located, in accordance with the detailed shipping instructions supplied by the applicant. Shipment will be made, transportation charges collect, to be paid by the consignee.

Although samples of equipment are available for the inspection by the purchaser, they are located in various depots throughout the United States, and it is impracticable to assemble all the items in one or more locations for inspection. Further, it is impracticable for individual purchasers to visit the numerous depots where material is located in order

to inspect prior to purchase. It is not possible, in case individual items of equipment are inspected by purchaser, to tag any particular piece of equipment for the individual purchaser to be held pending receipt of shipping order from the disposal agency. Purchasers are familiar with army and navy equipment, having worked with it during their military service. Prices for new, unused equipment, in excellent condition, have been set by the disposal agency. The material is classified according to condition and will be billed by the disposal agency at fair value. Prices will be scaled downward if used equipment is furnished. If only new, unused equipment, in excellent condition, is desired, applicants will so state and depots will not make substitution of material in less desirable classification. All claims and adjustments will be handled by the War Assets Corporation. These claims must be presented to the district or regional office handling the original request for purchase. It must also be understood that surplus property sales are in progress at all times and that delivery of all items selected by the applicant cannot be guaranteed, nor will back orders be established. Payments for equipment not furnished will be refunded. To the extent of availability, equipment will be shipped from the medical depot nearest the destination designated by the purchaser. However, surplus stocks are not evenly distributed throughout the army and navy medical depot system, and shipments of some of the equipment will have to be made from depots at a considerable distance from the destination.

★ ★

5,000 ASTP MEDICAL OFFICERS TO BE CALLED AS REPLACEMENTS

In a recent release the War Department stated that more than 5,000 young medical officers will be called to active duty by July 1 as replacements for officers of the Medical Corps who are eligible for separation from the service. These doctors, after receiving their academic training in medicine under the Army Specialized Training Program, are now completing their training by serving internships and residencies in civilian hospitals on an inactive status.

Information of the early call to active duty has been sent to all civilian hospitals by the Surgeon General of the Army and by the Procurement and Assignment Service for Physicians, Dentists and Veterinarians.

The 5,000 doctors being called to active duty are graduates of the Army Specialized Training Program whose tours of active duty as medical officers were scheduled to begin when they had completed hospital internships and residencies, essential professional preparation not available in military installations.

Approximately 3,300 enlisted men now assigned to ASTP units for training in medicine will receive the degree of Doctor of Medicine by July 1, when the ASTP medical program is to be discontinued. This group will be called to active duty at the completion of their internships. The enlisted men assigned for instruction in the freshman, sophomore and Junior classes in medicine will be separated from the program in March. Those who plan to continue their medical studies will be transferred to the Enlisted Reserve Corps and released from active military duty in order to continue their medical training in a civilian status.

Men separated from the medical training under the ASTP who do not plan to continue their medical studies will be transferred to other military duties and continued on active duty until they become eligible for separation from the Army under current War Department policies.

★ ★

RECONVERSION OF 9-9-9 PROGRAM

Inquiries about paragraph 3 of section III of directive number 382 (Nov. 6, 1945), relating to the circumstances under which hospitals may exceed quotas, have prompted the following further explanation:

Veterans should be accepted for residencies in hospitals without being counted in the resident quota until they are sufficiently trained to replace a commissioned officer satisfactorily. When a veteran is sufficiently trained to replace a commissioned officer, the officer should be released for active duty at once and at that time the veteran on duty should be counted in the quota. When an institution has thus replaced its last commissioned officer, all quota restrictions are withdrawn as to that institution.

For example, if a hospital has a quota of twelve residencies, six of which are filled by commissioned officers and six of which are filled by women or men who are ineligible for military service, and six veterans beyond the quota, it is expected that, when one of the veterans becomes sufficiently trained so that he can assume the duties of assistant resident in medicine (and there is a commissioned officer filling a position as assistant resident in medicine), the commissioned officer should be released for active duty and the veteran counted in the quota at that time. The hospital will then have five veterans who are not counted in the quota and twelve residents who are counted in the quota, five of whom will still be commissioned officers. This replacement program should continue as rapidly as possible between now and April 1, 1946, until the last commissioned officer has been replaced, at which time the hospital is no longer under any quota regulations.

It should be obvious to every hospital superintendent and medical director that the quicker he makes use of such veterans the more stable will be his staff and the sooner he can return to his peacetime resident program.

Procurement and Assignment Service Resident Quotas

The Procurement and Assignment Service will withdraw the resident quota restrictions on each hospital on the date on which that hospital releases

its last commissioned resident and will withdraw all quotas from other hospitals on April 1, 1946.

Procurement and Assignment Service Intern Quotas

No hospital should accept for internships beginning April 1, 1946 more interns from the senior class graduating in March, 1946 than their present intern quota. This rule holds for those hospitals which have 100 per cent of their interns on a July to April term. If the hospital has interns who started their internships after July 1, 1945 they should discount them from their quota and fill the remainder of their quota with March graduates. After April 1, 1946 Procurement and Assignment Service intern quotas may be disregarded.

★ ★

CAPT. BLAIR IS STATE MEDICAL OFFICER OF SELECTIVE SERVICE SYSTEM

The promotion of Capt. Earl H. Blair of Chicago to the post of State Medical Officer of the Illinois Selective Service System was announced recently by Col. Paul G. Armstrong, state director.

Captain Blair, formerly a National Guardsman of Ohio, was commissioned in the Army Medical Corps in October, 1942, and after serving ten months as Battalion Surgeon for the 35th Field Artillery, he was given assignments in several large Army hospitals before being attached to the Medical Division of National Selective Service headquarters, Washington, D.C., in December of 1943. Before entering active duty, he was examining physician for Chicago Local Board No. 30 and later was chairman of the Sherman Park Medical Examining Board. He is a graduate of Ohio State University, College of Medicine, and practiced medicine in Chicago for fifteen years. Since June of 1944, he has been the assistant state medical officer for Illinois.

Captain Blair resides at 9201 South Winchester Avenue, Chicago, with Mrs. Blair and their two children, Nancy Lee and Susan Elizabeth.

★ ★

ARMY AWARDS AND COMMENDATIONS

Lieutenant Col. Franklin C. McLean, now professor of pathologic physiology at the University of Chicago, who served during the war in the Chemical Warfare Service of the United States Army, was recently awarded the Legion of Merit. Dr. McLean, who was director of toxicology for the Chemical Warfare Service from October, 1943 to March, 1944, received the citation for his demonstration of remarkable talents and scientific versatility in laboratory and field testing and in improving the effectiveness of persistent blister and other gases. In addition to his work at Edgewood Arsenal Dr. McLean was chief of the Persistent Section of the San Jose Project in Panama. The citation was conferred also for his work as a member of the British-American coordination staff from June, 1944 to September, 1945, in which he was a factor in evaluating the biologic aspects of all research and testing of gas warfare equipment preformed by the United States and the British commonwealth. Previous to receiving his commission as lieutenant colonel Dr. McLean was director of the toxicity laboratory of the University of Chicago and resumed his duties there as professor of pathologic physiology on Oct. 1, 1945.

★ ★

CONSULTANTS NAMED FOR VETERANS' HOSPITALS

Eleven physicians were recently appointed to serve as consultants to the veterans' hospitals by Major Gen. Paul R. Hawley, Acting Surgeon General of the Veterans Administration.

Brig. Gen. Elliott C. Cutler, professor of surgery, Harvard Medical School, and also attached to the Peter Bent Brigham Hospital, Boston, headed the list. Other consultants are:

Lieut. Col. Brian B. Blades, Washington, D. C., chest surgery.

Col. Barrett Brown, Phoenixville, Pa., plastic surgery.

Dr. Trygve Gunderson, Brookline, Mass., diseases of the eye.

Lieut. Col. Aubrey Hampton, Washington, D. C., formerly of Harvard Medical School, Boston, radiology.

Dr. Bernard J. Pisani, New York, gynecology.

Dr. Donald M. Pillsbury, Philadelphia, assistant professor at the Jefferson Medical College and University of Pennsylvania School of Medicine, Philadelphia, skin diseases.

Dr. John N. Robinson, Sharon, Conn., urology.

Col. Roy Glenwood Spurling, Washington, D. C., neurosurgery.

Dr. Ralph Tovell, Hartford, Conn., anesthesiology.

Dr. Robert M. Zolliner, Boston, assistant professor, Harvard Medical School, general surgery.

Consultants now attached with the Army's Medical Corps will serve without pay until they have been released from active duty.

News of the State

PERSONALS · COMING EVENTS · MARRIAGES · DEATHS

BUREAU COUNTY

Col. R. E. Davies, Spring Valley, has returned home from Europe and is on terminal leave. Col. Davies will be separated from the army March 24. He expects to resume his practice in Spring Valley after his discharge.

At the meeting of the Bureau County Medical Society and their Auxiliary held in January the following officers were elected: Dr. F. E. Inks, Princeton, president of the Medical Society; Dr. A. T. Brown, Tiskilwa, vice president; and Dr. R. E. Davies, Spring Valley, secretary-treasurer. Officers of the Auxiliary are: Mrs. K. M. Nelson, Princeton, president; Mrs. Harold Hopkins, Walnut, vice president; Mrs. A. B. Troupa, Princeton, secretary; Mrs. G. E. Kirby, Spring Valley, treasurer; Mrs. G. E. Kirby, Spring Valley, historian.

Col. Henry Jacobs has resumed practice in Peru following his discharge from the army.

BOND COUNTY

Katherine B. Luzader, President of the Bond County Tuberculosis Sanatorium Board was recently reappointed by the Board of Supervisors for another three year term.

CHAMPAIGN COUNTY

Wm. Youngerman, Urbana, has been released from the army following three and one-half years of service and returned to the Christie clinic.

G. LeRoy Porter recently released from the army medical corps has returned to his practice as eye specialist at Carle Hospital clinic.

A joint meeting of the Champaign County Medical Society and Champaign County Bar Association was held February 27 at the Champaign Country Club.

CHRISTIAN COUNTY

At the January meeting of the Christian County Medical Society the following officers were elected: G. C. Bullington, Pana, president; F. W. Siegert, Pana, vice-president; A. S. Miller, Assumption, secretary-treasurer.

CLAY COUNTY

Lt. Col. H. B. Dillman, Flora, has been discharged from the army and resumed his medical practice with Dr. H. D. Fehrenbacher.

CLINTON COUNTY

Robert Roane, Carlyle, has resumed medical practice after three years of service in the Armed Forces. He is associated with his father, Dr. J. Q. Roane.

CRAWFORD COUNTY

Wm. B. Schmidt has returned to Robinson after three years of service in the Armed Forces. R. F. Olmsted of Chicago has been added to the staff of the Schmidt Clinic. Dr. Olmsted was formerly of Chicago.

COOK COUNTY

Dr. George F. Lull, formerly deputy Surgeon General, United States Army Medical Corps, has been appointed Associate General Manager of the American Medical Association.

The Society of Illinois Bacteriologists held

its annual dinner meeting February 8th in the Illini Union building on the University of Illinois Chicago campus. Five papers on bacterial subjects were presented.

Douglas A. MacFayden has been appointed head of the department of biochemistry in the Rush Presbyterian hospital division of the University of Illinois College of Medicine and Dr. George M. Hass has been appointed head of the department of pathology.

At the Annual Meeting of the Chicago Tuberculosis Society election of officers took place. Elected for the year 1945-1946 were: President — Dr. J. J. Mendelsohn, Chicago; Vice-President — Dr. A. S. Webb, Wheaton; Sec'y-Treas. — Dr. Hugo T. Cutrera, Chicago.

Lt. Col. Oscar E. Nadeau, Chicago surgeon, has received the Legion of Merit award from the army service forces at Washington, D. C., for outstanding work as medical officer in charge of the Fletcher General hospital, Cambridge, Ohio.

On February 4th fifty veteran medical officers on their way back to civilian practice began three-month refresher courses offered by the University of Illinois at its West Side Medical Center. This is the second of a series of such courses for returning doctors.

William W. Bolton, Wilmette, who served as a corps captain with the 9th Army and was 20 months in Germany received a medal for outstanding work in controlling the spread of typhus. It was the medal of the United States of America Typhus Commission, an agency of the War Department made up of military and civilian medical men and was the first of its kind presented here, by the surgeon general of the 6th Service Command.

David Slight gave the two opening lectures of a series on mental health conducted by the Illinois Society for Mental Hygiene in February. John Spiegel conducted the third lecture in the series.

Lt. Col. George D. Wilson has been appointed director of physical medicine for the National Society for Crippled Children and Adults, Inc. Col. Wilson will act in an advisory capacity in the society program to assist communities thruout the country in meeting medical problems posed by handicapped persons.

Edward Kapustka has returned from military service and resumed medical practice in Chicago.

Lt. Comd'r. Paul Ashley has reopened his office for general practice in Chicago Heights.

F. M. Dwan, Argo, has opened an office in his residence for the practice of medicine.

James A. Moxon, Elmwood Park, former health officer has been discharged from the army and opened his office in the village.

Robert W. Edwards, La Grange, has been released from the Navy and re-established his practice of medicine in the village.

Eugene Sodaro has been released from the Armed Forces and again resumed his practice in Forest Park.

J. R. Hughes, C. E. Flack and Clarence W. Monroe have been released from the Armed Forces and have resumed the practice of medicine in Oak Park.

Lawrence D. Ryan, formerly of River Forest, has returned to private practice in Chicago after three years of service in the Army.

Robert G. Fox has again resumed the practice of medicine after serving four years in the Army Air Corps.

J. I. Farrell has resumed his post at the Evanston Hospital where he is head of the department of urology. He has also resumed his teaching as a faculty member at the Northwestern Medical School.

H. B. Lustigman has resumed his practice in Glencoe having been released from the Army Medical corps.

Cmdr. Alvah L. Newcomb, Wilmette, has received his discharge from the Navy and reopened

his office for the practice of medicine.

Edmund S. Pisarski has been released from the army and has resumed his practice of medicine in Chicago.

Carl A. Walvoord has returned from military service and resumed the practice of medicine in South Holland.

T. H. Krumm has announced that his brother, John F. Krumm, recently discharged from the Army Medical corps will be associated with him.

S. M. Feinberg is scheduled to address the Milwaukee-Oto-Ophthalmic Society on March 27th on the subject of "Allergy of the Eye, Ear and Nose."

U. G. Dailey conducted clinics at the Florida A. and M. College in February and lectured on "The Diagnosis of Thyrotoxicosis."

DE KALB COUNTY

C. L. Nelson has returned to Sandwich and resumed the practice of medicine.

John W. Ovitz, Jr., Sycamore, is taking the three months' Medical Refresher Course at the University of Illinois Medical School. On completion of the course he will start practicing in Sycamore with his father.

M. Mahru has been discarged from the Army Medical corps and resumed the practice of medicine in Sycamore.

DU PAGE COUNTY

The newly elected officers of the Du Page County Medical Association conducted their first meeting in January at the Elmhurst hospital where the group meets. A. S. Watson, Glen Ellyn, has been installed as president; C. O. Evanson, Elmhurst, vice-president; and A. R. Richli, Naperville, secretary-treasurer.

At the annual staff meeting and election held recently at the Elmhurst Community hospital, the staff for 1946 will be as follows: E. S. Watson, Elmhurst, president; Harold Meisenheimer, Arlington Heights, vice president; Richard T. Marquardt, Lombard, secretary-treasurer.

Joseph P. Crabtree, Villa Park, former health officer of Villa Park, has been released from active duty and resumed the practice of medicine.

The Du Page County Medical Society held their regular monthly meeting in February. The speaker of the evening was Dr. Bert I. Beverly of Oak Park who discussed "Psychology in the Care of Children".

EFFINGHAM COUNTY

W. J. Gillesby and Glen R. Marshall, both recently released from the service have reopened their office in Effingham for the practice of medicine.

EDWARDS COUNTY

P. S. Nierenberg has returned to Albion to resume his medical practice after service in the army overseas.

FORD COUNTY

Five doctors of Ford County who served in a non-compensated capacity for two years or more in connection with Selective Service were awarded medals of merit at a special ceremony held in Champaign. The medals were presented by Governor Dwight Green to M. D. Peterson, and E. A. Tappan, Paxton; and R. N. Lane and A. L. Potts, Gibson City.

FULTON COUNTY

A. C. Bagge has established an office for the practice of medicine in Avon.

GALLATIN COUNTY

Joe Bryant, formerly of Chicago, has been released from the armed forces and has established an office for the practice of medicine in Ridgway.

HANCOCK COUNTY

At the January meeting of the Hancock County Medical Association held in Carthage, Dr. I. W. Salowitz of Plymouth was re-elected as president. This is the third consecutive term as head of the Medical Society.

IROQUOIS COUNTY

The new officers of the Iroquois County Medical Society are: A. W. Fordyce, Gilman, president; Ryland Buckner, secretary-treasurer.

S. D. Roeder, Milford, has been discharged from the armed forces and resumed his practice of medicine.

JACKSON COUNTY

James W. Weatherly and H. H. Rodewald of Murphysboro have been discharged from the armed forces and have resumed the practice of medicine.

Lt. Com. Jack Taylor, expects to resume his medical practice in Carbondale soon.

JERSEY COUNTY

R. G. Mindrup, Alton, has been released to inactive service with the Medical Reserve Corps and has reestablished his office and resumed his practice here.

KANE COUNTY

Edward Ross, formerly of Manteno, has taken over the management of the Bellevue Place Sanitarium in Batavia. Dr. Ross plans to make extensive changes and enlargements.

KANKAKEE COUNTY

The Kankakee County Medical Society held election of officers in January and Robert Bedard was elected president; Albert Nehf, vice president; A. L. Nickerson, re-elected secretary-treasurer.

The City Medical society also held elections, Margaret Lane being elected president; Harry Hartman, vice president; and A. L. Nickerson re-elected secretary-treasurer.

Louis Schlan and Isadore Spinka have returned to the medical staff of the Manteno Hospital after having served in the armed forces.

Several doctors from Manteno received the congressional medal of merit for their volunteer work for the selective service boards of Kankakee County. Those so honored were O. A. Phipps, R. V. Thomas, Walter F. Baer, James A. Manelli, A. L. Barbakoff and Edward Ross. The awards were made by Governor Dwight Green.

The Kankakee County Medical Society held their regular monthly meeting on February 12th and heard Charles M. Pease, Orthopedist for several Chicago hospitals give a talk on "Fractures".

LAKE COUNTY

William L. Ewald has resumed the practice of medicine in Waukegan following his discharge from the armed forces.

Lt. Col. A. C. Robbins has been separated from the army and resumed his practice of medicine in Waukegan.

Louis F. Kompare was elected president of the St. Therese hospital medical staff at a recent meeting of the doctors' group.

McDONOUGH COUNTY

R. C. Benkendorf has been discharged from the army and established offices in Bushnell for the general practice of medicine.

McHENRY COUNTY

B. B. Neuchiller, recently discharged from the Army, has resumed his practice as physician and surgeon in Woodstock.

McLEAN COUNTY

After three and a half years with the army medical corps, Ray W. Doud has resumed his practice of medicine in Normal.

Gordon Shultz has opened an office in Bloomington. After receiving his discharge from the army, Dr. Shultz attended the Northwestern university on a fellowship, to study orthopedic surgery. He intends to specialize in this field.

The McLean County Medical Society held its regular meeting in February and heard John D. Claridge of Chicago discuss "AMPUTATION".

MACON COUNTY

At the January meeting of the Macon County Medical Society, Dr. Deward O. Ferris, Assistant Professor of Surgery at Mayo Foundation, spoke on "Carcinoma of the Uterus". At the February meeting the members of the Society heard Newell C. Gilbert, Professor Medicine, Northwestern University Medical School and Editor of "Archives of Internal Medicine" speak on "The Treatment of Coronary Thombosis."

Harold S. Friedman, Decatur, is associated with M. O. Williamson in the practice of medicine.

MADISON COUNTY

W. W. Brown, Collinsville, has resumed his practice of medicine following discharge from the Medical Corps.

Charles D. Ehlert has resumed his practice of medicine in Alton following discharge from the Army Medical Corps.

F. E. Wilson has returned to Highland and will resume his medical practice.

E. H. Droege of Granite City has returned to the private practice of medicine and surgery after serving five years in the Army Medical Corps.

MONROE COUNTY

At the regular meeting of the Monroe County Medical Society the following officers were elected: E. T. Lark, president, R. G. Empson, vice-president, J. W. Werth, secretary-treasurer.

MORGAN COUNTY

R. M. Norris and H. V. Norris have returned to Jacksonville and resumed the practice of medicine.

E. J. Boros has returned to Bethany to practice medicine after completing over three years of service with the armed forces.

PERRY COUNTY

J. A. Mathis and G. H. Edwards have been discharged from the service and have resumed their practice at the same location in Pinckneyville.

PEORIA COUNTY

The following Peoria doctors have returned from service and resumed the practice of medicine — J. M. Ketay, Wm. Cooley, Jr., C. S. M. Koerner and W. A. Malcolm.

PIKE COUNTY

W. Robert Malony of Omaha has located permanently in Pittsfield and will share office room with Dr. Kraybill.

RICHLAND COUNTY

John D. Stull, specialist in children's diseases has joined the staff of The Olney Sanitarium and Clinic.

ROCK ISLAND COUNTY

At the regular meeting of the Rock Island County Medical Society held in February, Dr. Wm. Thomas, former Associate Professor of Medicine, Rush Medical School, spoke on "The Use of Histamine in Migraine Headaches".

ST. CLAIR COUNTY

Lt. Colonel L. C. Boemer has returned from four years of service with the Army and resumed his practice of medicine in Millstadt.

A. R. Sintzel has resumed his practice of medicine in Belleville following discharge from the armed forces.

STEPHENSON COUNTY

The Stephenson County Medical Society met in February for the annual election of officers. The following officers were elected: Carl M. Becker, president; W. Edward Rideout, vice-president, D. J. Doelker, secretary-treasurer.

E. W. Brott, who served with the armed forces for over two years, has returned to Lena and resumed the practice of medicine.

VERMILION COUNTY

H. E. Ogle, who has practiced medicine at Potomac for the past 30 years has opened an office in Danville where he will conduct a general practice.

J. Gilbert Ellis has opened his medical practice again in Georgetown after an absence of two years which he spent in the armed forces.

At the February meeting of the Vermilion County Medical Society, F. S. Crockett of Lafayette, Indiana, spoke on "Rural Medical Care".

WAYNE COUNTY

G. T. Ransom has opened his office in Fairfield for the practice of medicine.

WILL COUNTY

Wayne S. McSweeney has received his dis-

charge and resumed his practice of medicine in Joliet.

WILLIAMSON COUNTY

Martin M. May has returned to Marion and reopened his office for the practice of medicine.

WINNEBAGO COUNTY

Eugene Perry, Assistant Professor of Urology, Northwestern University, was the guest speaker at the Winnebago County Medical Society's monthly meeting. His subject — Urological Examinations.

H. Dick Countryman has resumed his practice of medicine in Rockford after three and a half years of army service.

Albert Roseborough has resumed practice in Rockford having been discharged from the army medical corps.

Roland I. Pritikin, formerly of Chicago, has established an office in Rockford and will specialize in ophthalmology.

The Illinois Trudeau Society held a meeting on February 27th in Rockford. Drs. C. Violini, Willard Van Hazel and Paul Holinger, of Chicago, and Dr. W. M. Peck, of Detroit, shared the afternoon program. Dr. H. R. Edwards, of New York City, was the evening speaker.

"Mental Illness — A Human Deficit" was the subject of a lecture given by Rudolph G. Novick, in a series of lectures being held in Rockford.

DEATHS

Wm. Evan Baker, Genoa. Harvey Medical College 1904. Practicing physician in the Austin district of Chicago for 25 years before moving to Genoa. Died January 28, 1946. Age 82.

William Crowley, Oak Park. Northwestern University Medical School 1909. Practicing physician on the west side of Chicago for more than 25 years. Died February 7th. Age 60.

Eugene Crandle, Gorham. St. Louis College of Physicians and Surgeons 1904. Died February 1st. Age 77.

Earl Gaines Conn, Chrisman. Bennett College of Ecl. Med. & Surgery 1914. Physician and surgeon of Edgar county for 31 years. Died following a cerebral hemorrhage February 5th. Age 62.

M. H. Herzman, Chicago. Jenner Medical College 1899. Practiced medicine for more than 50 years. Died February 5th. Age 78.

W. A. Hancock, Fairfield. Marion-Sims College of Medicine, St. Louis, 1895. Physician in Fairfield for over 50 years. Died of cerebral hemorrhage January 16th. Age 74.

W. D. Harrell, Norris City. Rush Medical College 1892. Practicing physician for more than 50 years. Died January 14, 1946. Age 87.

Robert A. Lamb, Chicago. Loyola Medical School 1926. Member of the staff of Alexian Brothers hospital. Died February 18th. Age 49.

G. B. Lutyens, Springfield. University of Illinois College of Medicine 1906. Died of a heart attack January 23, 1946. Age 73.

Thomas Chester McCord, Paris, retired. Medical College of Ohio 1883. Former mayor of Paris. Dr. McCord was a surgeon major in the Spanish American war and a member of a commission which investigated the sinking of the battleship Maine. Died February 13th. Age 89.

Henry H. Merrell, Chicago, retired. National Medical College 1896. Died February 7th. Age 80.

Wm. H. Mercer, Taylorville. St. Louis University School of Medicine 1898. Past President of the Christian County Medical Society. Oldest practicing physician in Christian county. Died January 23rd. Age 75.

Julius Noerdlinger, Chicago. University of Wuersburg, Germany 1915. Died January 21st. Age 56.

A. C. Puckett, Fairfield. Physio-Medical College, Cincinnati, 1880. Believed to be the oldest practicing physician in Southern Illinois. Died January 28th. Age 93.

Frederick J. Port, Kincaid. University of Illinois College of Medicine 1912. Died of a heart attack February 15, 1946. Age 59.

Charles Scott, formerly of Belvidere. Northwestern University Medical School 1900. Died at Twin Falls, Idaho, January 9th. Age 67.

Longin Tabenski, Chicago. Chicago College of Medicine and Surgery 1914. Died February 15th. Age 59.

Chas. Yeck, Pawnee, retired. University of Louisville School of Medicine 1891. Died January 15th. Age 78.



When patients are given Cal-C-Tose, the physician is assured of their cooperation because they actually enjoy taking vitamins in this palatable form. Either hot or cold, Cal-C-Tose makes a tempting beverage whose delicious chocolate flavor carries no suggestion of medication. Cal-C-Tose supplies generous amounts of vitamins A, B_1, B_2, C, and D, and dibasic calcium phosphate in a form acceptable even to fastidious patients. Available in 12-oz and 5-lb containers. . . .

HOFFMANN-LA ROCHE, INC. • ROCHE PARK • NUTLEY 10, NEW JERSEY

THE PLEASANT WAY TO TAKE VITAMINS **CAL-C-TOSE** *Roche*

Announcing...

A THERAPEUTIC FORMULA FOR VITAMIN DEFICIENCIES

HYPERVITAM

A THERAPEUTIC VITAMIN FORMULA

Daily dose of 3 CAPSULES contains:

Vitamin A	30,000 U.S.P. Units
Thiamine (B_1)	30 mg.
Riboflavin (B_2)	15 mg.
Niacinamide	150 mg.
Pyridoxine (B_6)	3 mg.
Calcium Pantothenate	15 mg.
Ascorbic Acid (C)	300 mg.
Vitamin D	3,000 U.S.P. Units
Alpha Tocopherol (E)	30 mg.

HYPERVITAM* embodies 2 basic principles in the therapy of vitamin deficiencies:

1. MORE COMPLETE FORMULA—vitamin deficiency symptoms are almost always multiple, rarely single.
2. EXCEPTIONALLY HIGH POTENCIES—vitamin deficiency diseases should be treated with *intensive* dosage . . . in divided doses for maintaining more uniform blood levels.

U. S. VITAMIN CORPORATION *pioneers again!*

1936—with multiple vitamin-mineral diet supplement—VI-SYNERAL

1940—with injectable preparation of Vitamin B complex factors—POLY-B SPECIAL

1943—with aqueous preparation combining fat- and water-soluble vitamins—VI-SYNERAL VITAMIN DROPS

1945—with therapeutic vitamin formula—HYPERVITAM

*Trade Mark Reg. U. S. Pat. Off.

Available in soft gelatin oval capsules, in bottles of 30, 90 and 500

PROFESSIONAL SAMPLES AND LITERATURE AVAILABLE

U. S. VITAMIN CORPORATION, NEW YORK 17, N. Y.



rapid availability

HEMATINIC PLASTULES* contain *ferrous sulfate* in a semifluid medium sealed to preserve it in the more effective ferrous state. Rapid disintegration and diffusion in the gastrointestinal tract assure efficient absorption. The daily dose supplies almost twice the amount of iron considered sufficient for the treatment of simple iron deficiency anemia.

Wyeth

*REG. U. S. PAT. OFF.

HEMATINIC PLASTULES
PLAIN
Dose: 3 Plastules daily

HEMATINIC PLASTULES
WITH LIVER CONCENTRATE
Dose: 6 Plastules daily

Supplied in bottles of 50, 100 and 1000

WYETH INCORPORATED • PHILADELPHIA 3 • PA.



DUTY CONSCIOUS

Equally Effective in:
Constipation • Colitis
Diarrhea



**Zymenol Contains Pure Aqueous Brewers Yeast (no live cells)*

Zymenol makes the bowel duty conscious by maintaining normal intestinal content through Brewers Yeast Enzymatic Action* and aiding restoration of normal intestinal motility with Complete Natural Vitamin B Complex.*

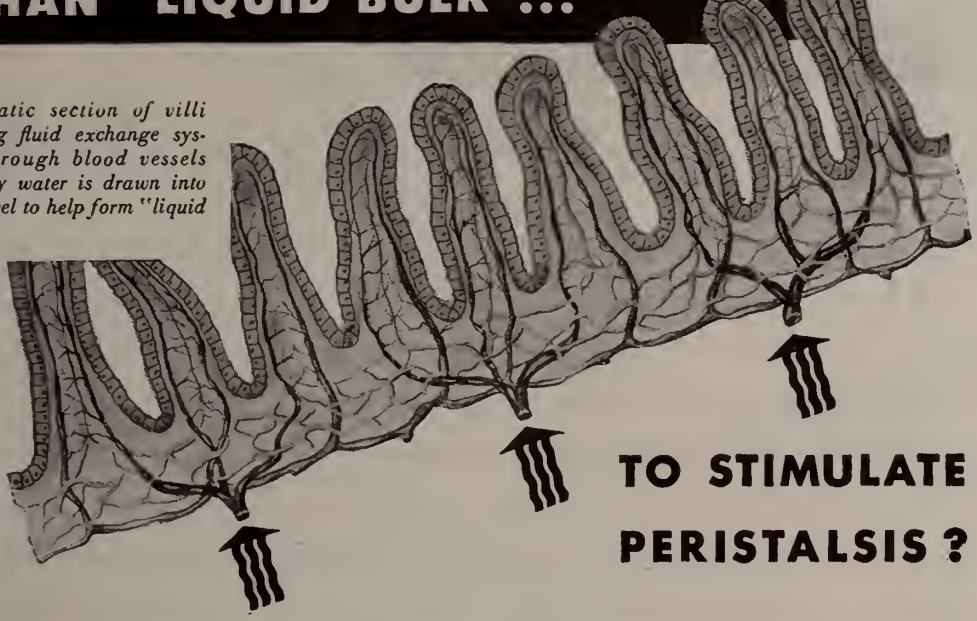
Natural urge to defecate is re-established without carthar-sis, artificial bulkage or large doses of mineral oil.

Economical teaspoon dosage avoids oil leakage and does not affect vitamin absorption.

Write for FREE Clinical Size

OTIS E. GLIDDEN & CO. INC. EVANSTON ILLINOIS

WHAT COULD BE MORE GENTLE THAN "LIQUID BULK"...



Schematic section of villi showing fluid exchange system through blood vessels whereby water is drawn into the bowel to help form "liquid bulk."

TO STIMULATE PERISTALSIS?

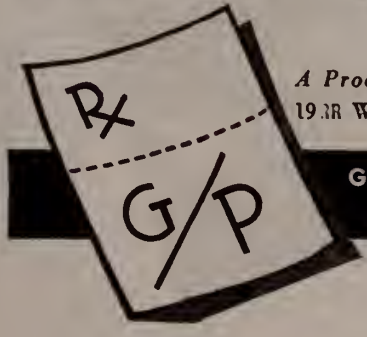
When a laxative is indicated, the physician knows that *effectiveness* coupled with *gentleness* are the qualities to be desired.

SAL HEPATICA combines both these qualities because it follows nature's own methods—utilizes the gentle pressure of "liquid bulk" to reinforce peristalsis.

Shortly after SAL HEPATICA is administered, the peristaltic musculature is stimulated and the bowel flushed. Usually within an hour the intestinal tract is gently but effectively cleansed of undesirable waste.

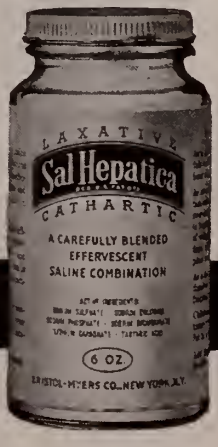
Because of this gentle yet thorough relief, SAL HEPATICA has enjoyed the confidence of the medical profession for many years.

SAL HEPATICA



A Product of BRISTOL-MYERS COMPANY
19[illegible]R West 50th Street • New York 20, N. Y.

GENTLE PRESSURE FOR GENTLE YET THOROUGH LAXATION



ON QUICK ENERGY *From Candies*

MEN engaged in strenuous labor instinctively turn to quick-energy foods during rest periods to replenish waning glycogen stores. The popularity of candy during these "breaks" is well established by common observation. For candy not only has a universal taste appeal but—more important from a nutritional standpoint—it supplies quickly-digested, energy-producing nutrients to appease the appetite and satisfy the metabolic needs of the moment. Office workers, school children, housewives, and others engaged in semi-sedentary occupations can quickly benefit from this contribution of candy. Whatever the work that may be performed, candy through its nutritional contribution can lessen fatigue and increase muscular stamina.

THE NUTRITIONAL PLATFORM OF CANDY

1. Candies in general supply high calaric valve in small bulk.

2. Sugar supplied by candy requires little digestive effart to yield available energy.

3. Thase candies, in the manufacture af which milk, butter, eggs, fruits, nuts, ar peanuts are used, to *this* extent alsa—

(a) pravide bialagically adequate prateins and fats rich in the unsaturated fatty acids;
(b) present appreciable amaunts af the impartant minerals calcium, phaspharus, and iran;
(c) cantribute the niacin, and the small amaunts of thiamine and riboflavin, contained in these ingredients.

4. Candies are af high satiety value; eaten after meals, they cantribute ta the sense af satisfactian and well-being a meal should bring; eaten in maderatian between meals, they stave aff hunger.

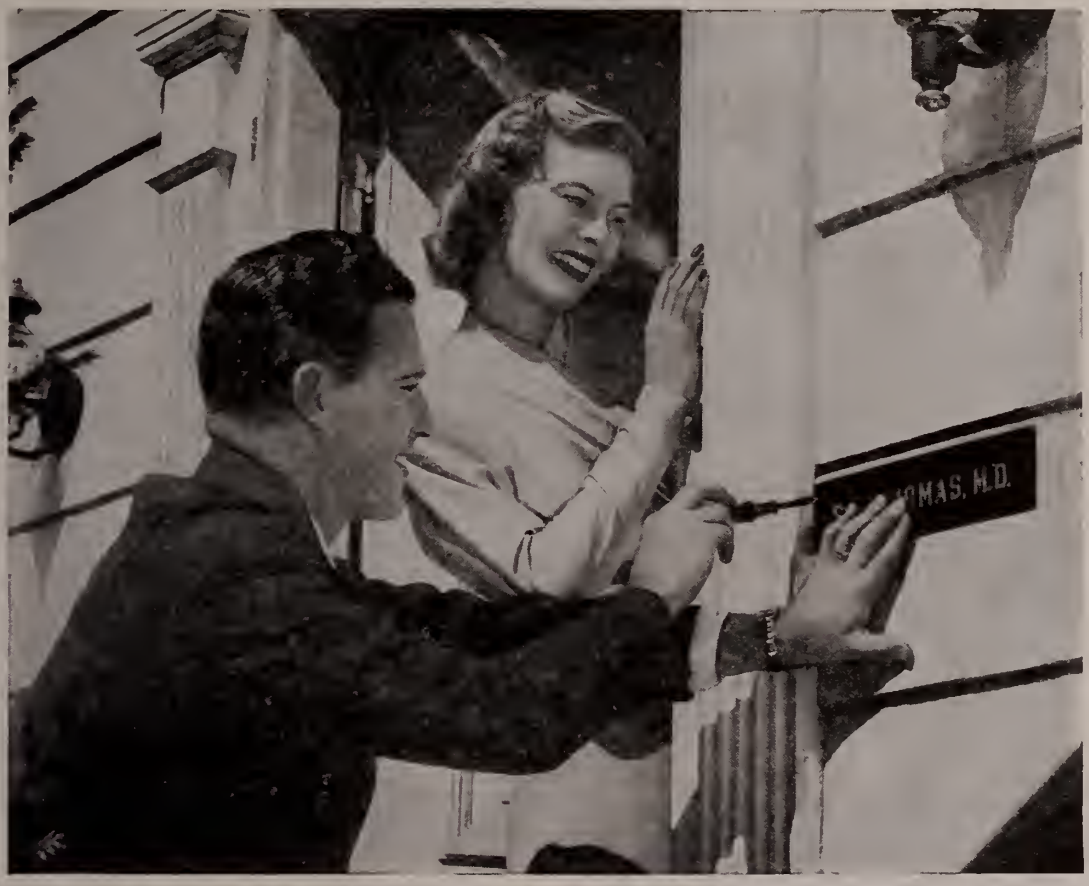
5. Candy is mare than a mere saurce af nutriment—it is a marale builder, a cantributian ta the joy af living.

6. Candy is unique amang all faads in that it shaws relatively less tendency ta underga spailage, chemical or bacterial.

This Platform is Acceptable for Advertising in the Publications of the American Medical Association

COUNCIL ON CANDY OF THE **NATIONAL CONFECTIONERS' ASSOCIATION**

1 NORTH LA SALLE STREET
CHICAGO 2, ILLINOIS



There is a Doctor in the House

—and it took a minimum of $15,000 and 7 years' hard work and study to get him there!

● Proudly he "hangs out his shingle," symbol of his right to engage in the practice of medicine and surgery. But to a doctor it is more than a right: it is a privilege — the privilege of serving mankind, of helping his fellow man to a longer, healthier, and happier life.



According to a recent nationwide survey:

More Doctors Smoke Camels

than any other cigarette

R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

Bringing Autonomic Innervation

UNDER CONTROL



...there is no gentler, more effective means than the administration of DONNATAL, which incorporates, in standardized amounts, the three spasmolytic, natural belladonna alkaloids in carefully balanced proportions with the central sedative and peripheral antispasmodic phenobarbital, thus potentiating the alkaloidal action.

The synergism of DONNATAL ingredients allows its therapeutic application in a very wide range of conditions where relaxation of smooth muscle spasm and central sedation are indicated, notably in diseases of the gastro-intestinal tract, genito-urinary system, respiratory tract, and in other spasticities of vagotonic origin. Non-toxic, non-narcotic, and stable—DONNATAL achieves good results with minimal dosage.

A. H. ROBINS COMPANY • RICHMOND 19, VA.

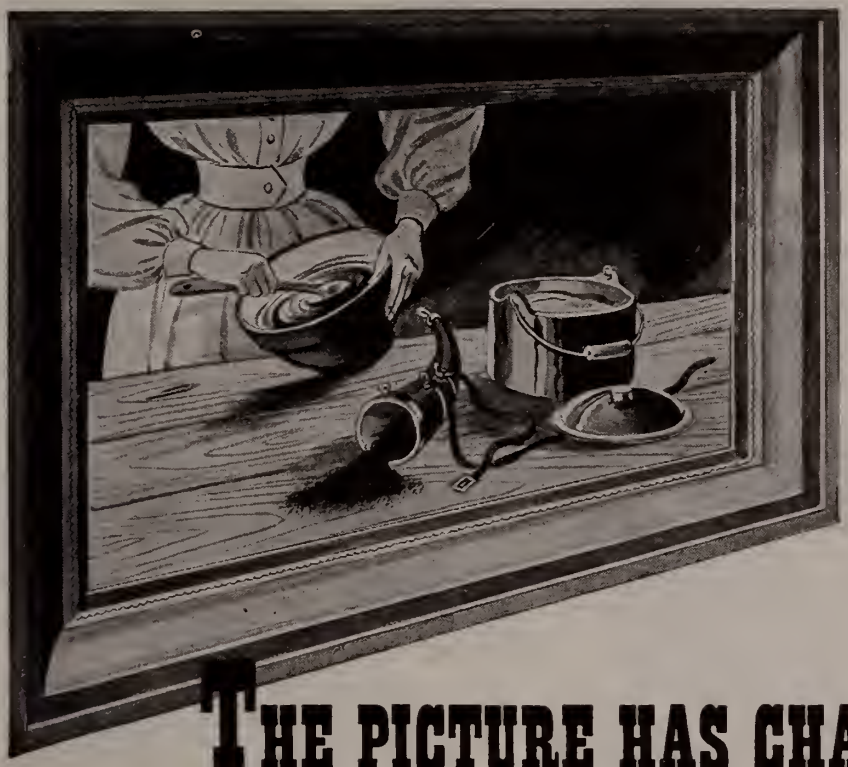
Ethical Pharmaceuticals of Merit . . . . since 1878

AVAILABLE: In bottles of 100 tablets

FORMULA: Each tablet contains belladonna alkaloids (hyascyamine, atropine and hyoscine) equivalent to approximately 5 min. of tr. belladonna plus ¼ gr. phenobarbital.

DONNATAL *a Robins Triumph*

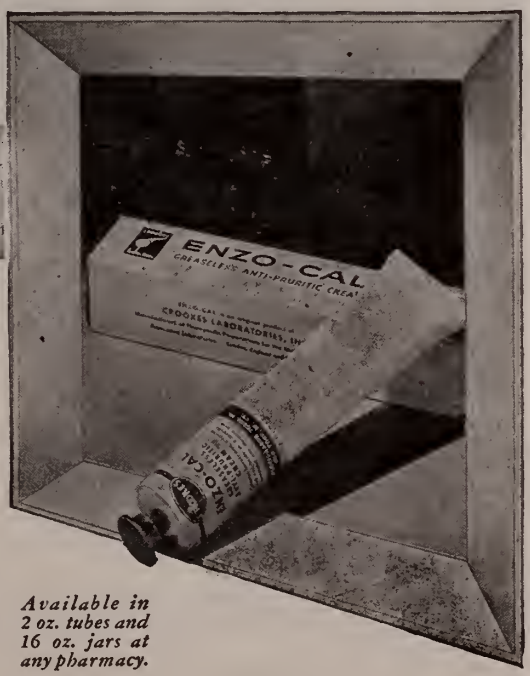




GUNPOWDER mixed with lard was a popular folklore remedy for itching among Pennsylvanians a century ago.

THE PICTURE HAS CHANGED

NOW... it's Enzo-CAL for ITCHING

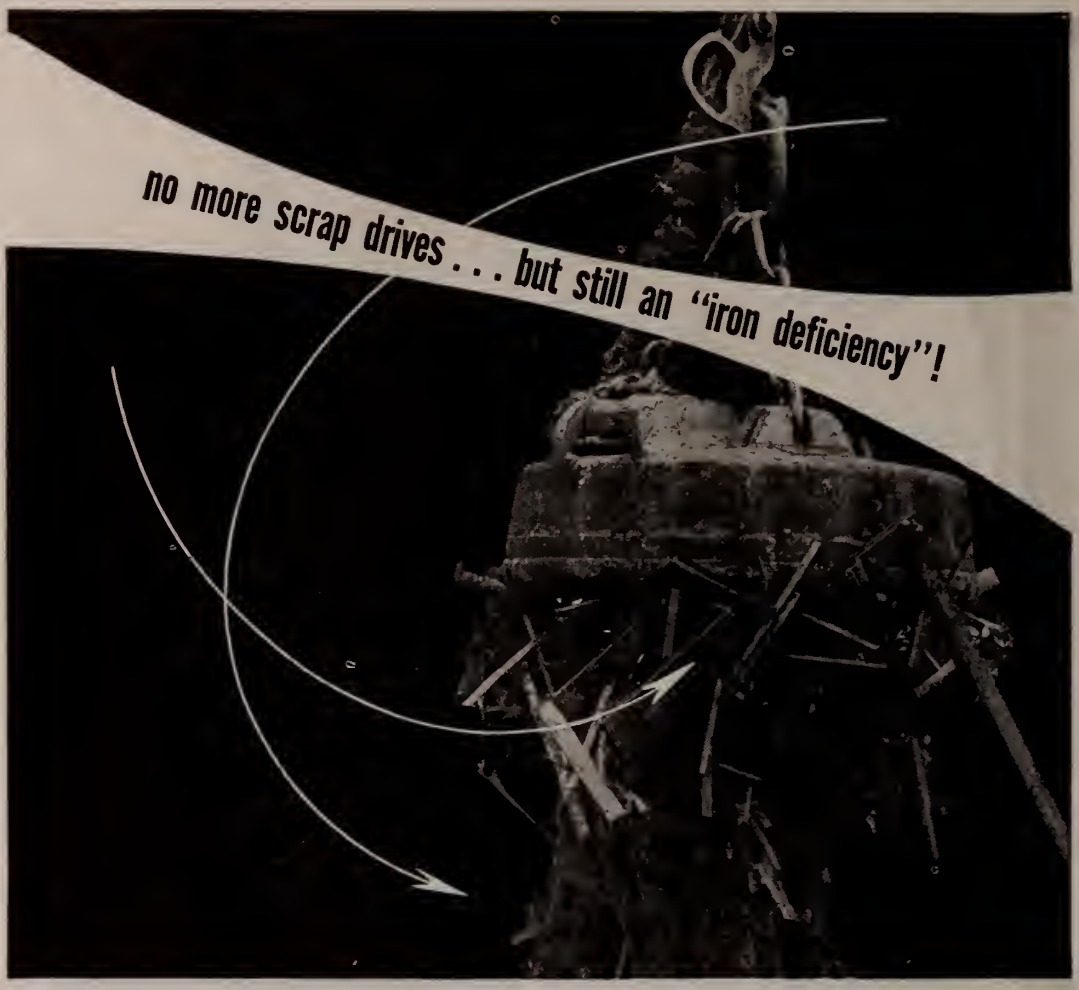


Available in 2 oz. tubes and 16 oz. jars at any pharmacy.

When prompt, *positive* relief of pruritus is demanded, prescribe ENZO-CAL... therapeutically sound and effective combination of semi-colloidal calamine, and zinc oxide with benzocaine in a flesh-colored, *greaseless* cream that will not stain clothing or linens.

May we send you a sample of ENZO-CAL? Write us at 305 East 45th Street, New York 17, N. Y.

CROOKES Laboratories



Wartime scrap drives are just a memory. Shortages of scrap iron and metals, so urgently needed a short time ago, no longer exist. Yet another "iron deficiency" remains . . . just as prominent and as necessary to remedy as any wartime deficiency.

Hypochromic anemia—even a frequent problem for the physician in peacetime—has been accentuated by years of war. Nerve strain, food rationing and slap-dash eating habits have left their mark—a sharp increase in the incidence of iron-deficiency anemia!

'Ribothiron' Tablets and Elixir (Ferrous Sulfate with Vitamins B_1 and B_2) are specifically designed for the prophylaxis and treatment of iron-deficiency anemia. Each of these two efficient preparations provides ferrous sulfate—clinically the most effective and best tolerated form of iron—in combination with two essential B vitamins which may be necessary for normal absorption and utilization of the element. Sharp & Dohme, Phila. 1, Pa.

TABLETS

Each sugar-coated tablet contains: Ferrous sulfate exsiccated 3 gr. (equivalent to 4.3 gr. ferrous sulfate U. S. P.); Vitamin B_1 (Thiamine hydrochloride) 0.5 mg.; Vitamin B_2 or G (Riboflavin) 0.5 mg.

Supplied in bottles of 100 and 1,000 tablets. Dosage: One tablet four times daily, after each meal and upon retiring.

ELIXIR

Each fluidounce of this palatable elixir contains: Ferrous sulfate U. S. P. 20 gr.; Vitamin B_1 (Thiamine hydrochloride) 2 mg.; Vitamin B_2 or G (Riboflavin) 2 mg.

Supplied in pint and gallon bottles. Dosage: One dessertspoonful four times daily, after each meal and upon retiring.

'RIBOTHIRON' *Tablets and Elixir*

Ferrous Sulfate with Vitamins B_1 and B_2

SHARP & DOHME

Helps Shorten Calls For You

Give New Mothers FREE DAILY GUIDE BOOK

WRITTEN BY

Phyllis Krafft Newill, under direction of a leading pediatrician





Here is a guide book for mothers from the pre-natal period up through the romper age free for distribution to your patients.

No effort was spared to make "Bringing Up Baby" authoritative on feeding, care, and training. It was written by Phyllis Krafft Newill, co-author of "All About Feeding Children," the book selected by Parents' Magazine as one of the best of 1944. She worked under the supervision of a well-known pediatrician and psychiatrist, and the manuscript was read and approved by physicians before publication.

Short explanations of the food values in Quaker Enriched Farina constitute the only advertising matter (the widespread acceptance of this time-tested Quaker product as a "first cereal" . . . . . its added Vitamin "D," 2-B Vitamins, Calcium and Iron). All such matter is factual and restrained in style.

To get a sample copy, fill out and mail the coupon below. Note also that you may get any reasonable quantity shipped immediately, or have a designated quantity shipped periodically, as you instruct.

QUAKER ENRICHED FARINA

Mail This Request Coupon NOW

THE QUAKER OATS COMPANY, Box 712, Chicago, Ill.

Please send your new booklet, "Bringing Up Baby," in the following quantities: A sample copy—. Immediate shipment of—. Shipment of — every — weeks.

Name .....

Address .....

City.. ....Zone.. .State. .....



You can't overrate the value of CONTROL

You can probably think of many instances where *control* and *safety* are inseparable.

One case in point affects your practice most directly. It's the manufacture of those products you use or recommend for your patients daily. For example, it's the efficient system of *quality control* used in the development of U.D. pharmaceuticals that makes them notable for consistent purity and potency.

The system's success in modern U.D. laboratories is due largely to the fact that veteran and professional men set and maintain the high standards. Moreover, these doctors, chemists and pharmacists—who form the Formula Control Committee—are content with nothing less than a *personal double check* of every finished formula bearing the trusted U.D. label.

You can be confident that your orders are filled with finest ingredients when you specify U.D. pharmaceuticals. Just as your patients are sure of reliable service in every respect at the nearest neighborhood Rexall Drug Store.

Puretest Plenamins . . . complete vitamin dietary supplement in capsule form. Vitamins A, D, B_1, C, E, G (B_2), B_6, Niacinamide, Calcium Pantothenate, with Liver Concentrate and Iron Sulfate. At all Rexall Drug Stores.

UNITED-REXALL DRUG CO.

Rexall DRUGS

U.D. products are available wherever you see this sign

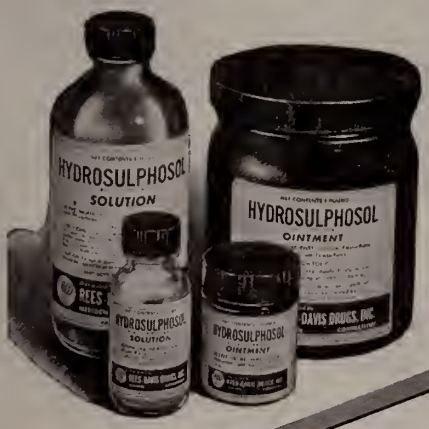
PHARMACEUTICAL CHEMISTS FOR MORE THAN 43 YEARS

Los Angeles • Boston • St. Louis • Chicago • Atlanta • San Francisco
Portland • Pittsburgh • Ft. Worth • Nottingham, England • Toronto • So. Africa

UNITED-REXALL DRUG COMPANY AND YOUR REXALL DRUGGIST • *Your Partners in Health Service*

A Fundamental Approach
TO SULFUR METABOLISM

HYDROSULPHOSOL



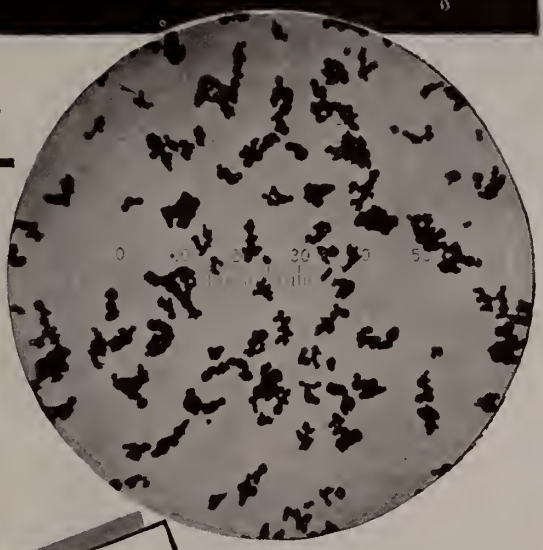


Illustration showing flowers of sulfur magnified 82X: small divisions = 10 microns. The size of the colloidal sulfur particle in Hydrosulphosol is estimated at 1/1000 of a micron or 1/10,000 of the small division particle illustrated.

A true solution of sulfur bearing compounds resulting solely from the reduction of flowers of sulfur by a catalytic process. In aqueous solution, it is capable of releasing its unusually high concentration of sulfhydryl ion in readily utilizable form . . . without evidence of toxic reaction.

Its therapeutic importance may best be evaluated by the fact that the —SH radical of the cysteine forms the active group in glutathione, alone of reported importance in connection with tissue oxidations.

Hydrosulphosol is indicated in the management of burns, ulcers and pathological conditions in which sulfur metabolism is a clinical consideration.

Reprints of scientific papers by authoritative investigators available on request.

Rees-Davis Drugs, Inc.
MERIDEN, CONNECTICUT



FOR THE RELIEF OF URINARY RETENTION

THE subcutaneous injection of ¼ milligram of Doryl, conveniently supplied in 1 cc. ampuls of Doryl Solution, has proved effective in relieving a large percentage of cases of postoperative urinary retention, retention following labor, and retention accompanying certain types of spinal cord lesions. This use of Doryl may obviate the necessity for catheterization with its attendant risk of infection. Two-milligram Doryl tablets are available for oral use when a slower-acting parasympathetic stimulation is sufficient.

DORYL
REG. U. S. PAT. OFF.
(Carbamylcholine Chloride Merck)
An effective parasympathetic stimulant

LITERATURE ON REQUEST

MERCK & CO., Inc. *Manufacturing Chemists* **RAHWAY, N. J.**

DEPENDABILITY... the most important quality in a contraceptive

the extra assurance
with every tube of
Koromex Jelly

TIME TESTED CLINICAL RECORD



with confidence

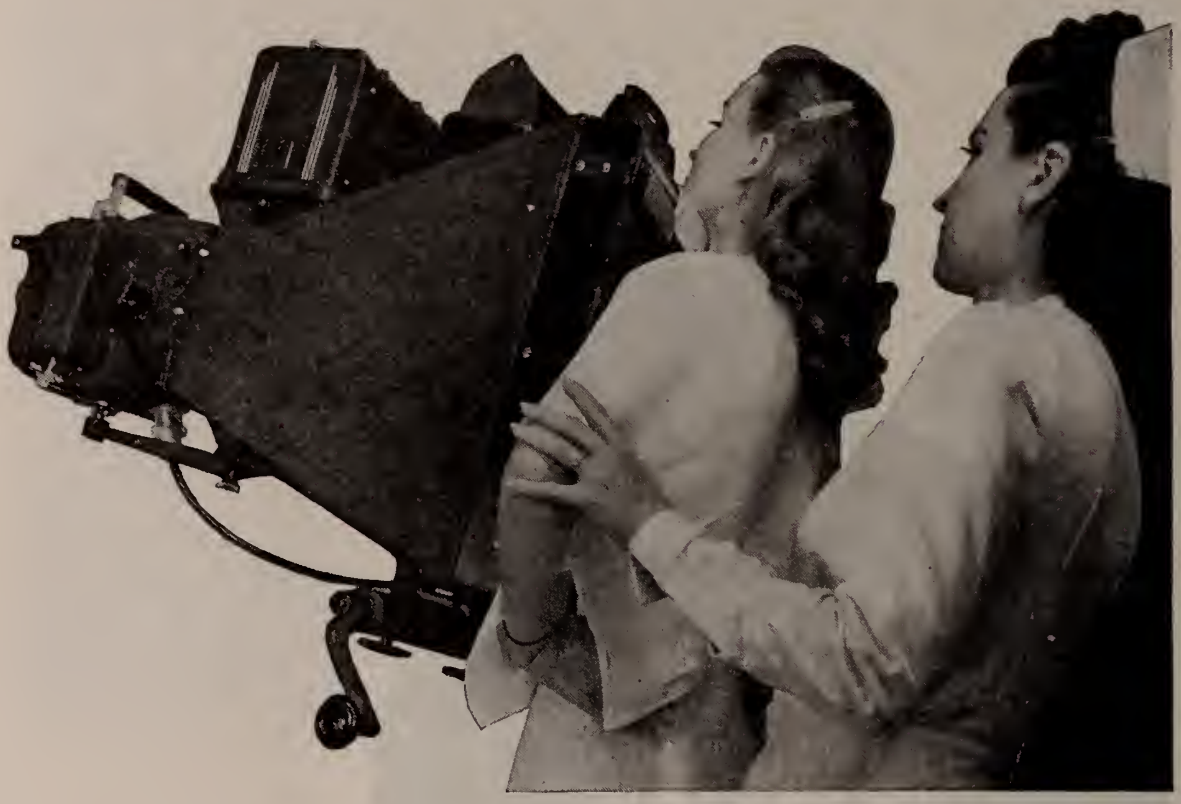
prescribe...

ACTIVE INGREDIENTS: Boric acid 2.0%, oxyquinolin benzoate 0.02% and phenylmercuric acetate 0.02% in a base of glycerin, gum tragacanth, gum acacia, perfume and de-ionized water.

write for literature

HOLLAND-RANTOS CO., Inc.
551 FIFTH AVENUE • NEW YORK 17, N. Y.

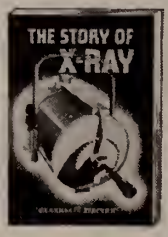
Is Your Community Awaiting an X-Ray Chest Survey?



Through well-directed educational campaigns sponsored by tuberculosis organizations throughout the nation, men, women, and children have been learning about technological developments which today make it economically feasible to conduct x-ray chest exminations of large groups of people for the purpose of detecting unsuspected tubercular infections in apparently healthy individuals.

Public interest having been so thoroughly aroused, many communities have adopted individually planned x-ray chest survey programs as a most effective measure for tuberculosis control—for screening out and isolating individuals who, "ignorant of the fact that they have the disease, unknowingly jeopardize their own lives and the lives of those with whom they come in contact."

Come the time when such a survey is suggested for your community, and your professional advice probably sought by the local tuberculosis society, we shall be glad to help you prepare a summary which would evaluate the various methods and facilities used for different types of chest surveys. These evaluations, may we assure you, will be unprejudiced, as G-E photo-roentgen apparatus is not limited to but one model, nor restricted to the use of one size of film. Address General Electric X-Ray Corporation, 175 W. Jackson Blvd., Chicago 4, Illinois.



For Your Reception Room—this booklet will prove of absorbing interest to waiting patients. It commemorates the 50th Anniversary of the discovery of x-ray, and recounts the notable contributions of x-ray science, not only to medicine but also to many important phases of industry. Send for your complimentary copy. Ask for Pub. C13.

GENERAL ELECTRIC X-RAY CORPORATION

Cholmodin

Reg. U. S. Patent Off.

THE COMPLETE APPROACH TO HABITUAL CONSTIPATION

Although many substances are available for promoting bowel evacuation, they cannot be regarded as corrective agents in habitual constipation. Most cathartics act solely upon the lower colon, temporarily relieving fecal stasis or accumulation without overcoming the disturbed physiologic mechanisms involved in constipation.

Cholmodin

containing deoxycholic acid (1½ gr.) and extract of aloes (¾ gr.) — exerts its stimulating action upon the *entire* intestinal tract. Deoxycholic acid, a normal constituent of human bile, promotes peristaltic activity in the small intestine, and aids in the digestion of fat as well. Extract of aloes is promptly hydrolyzed under the influence of deoxycholic acid, and promptly exerts a continuous but moderate action upon the colon. Thus the entire tract is activated, producing evacuations of normal consistency without discomfort or undue water loss. Cholmodin is especially advantageous in habitual constipation encountered in elderly and bedridden patients, when re-education of the gastro-intestinal tract is required. It is also an excellent cathartic for occasional use.

Available through all pharmacies in bottles of 50 tablets.

Riedel-de Haen

DIVISION OF AMES COMPANY, INC.

NEW YORK 13, N. Y.

P. R. N.

The Jocular Jingles of C. G. F.

by

Charles G. Farnum M. D.
Peoria, Ill.

THE NIGHT CALL

sonorous gurgling
half strangled
sleep.

sharp raucous
impertinent jangling
bell.

terrified beseeching
voice imploring
haste.

somnolent automatic
dressing by
reflex.

slamming door —
swallowed into the
night.

ROUTINE OF THE G. P.

Nimbly we leap out of bed
About the hour of dawn,
Shave ourselves, are quickly fed;
We must be off and gone!

The general practitioner's regime,
Is one of strenuosity;
Our speed, which we so very much esteem,
Is one of great velocity.

First we see a babe with colic,
Then a gagging alcoholic,
We wash his stomach clean of what he drank;
To the hospital we hustle
And from room to room we bustle,
See many patients, taking time to thank
Kind Heaven, we've not broken any bones,
Nor had an excavation for gall stones;
We've escaped senile psychosis,
Lingering tuberculosis,
And pernicious anaemia
And vicious tularaemia.
Next we hurry off to see a woman with hysteria,
Then a youngster with rubella
And some more with varicella,
And distribute nice red signs including a diphtheria;
Next a bad endocarditis
And an old encephalitis;
Then batte for an hour with a hemophilic bleeder.
A myeloid leukaemia,
A septico-pyaemia,
Then warn a diabetic's nurse for fear she'll overfeed her.

We see a neurasthenic
That may be schizophrenic;
Then without procrastination
We increase the population;
We treat a tonsillitis,
See an appendicitis,
Which we send into the hospital to have an operation.
By this time we are entitled to a half hours recreation.
So we hasten off to lunch
With a likewise busy bunch;
A fine committee bent on civic duty.
There we confer, profoundly wise,
Promote a scheme to advertise
Our city fair and all its wondrous beauty.

To our office and the many problems there,
To assist all those who come with grief or care.
A stomach ulcer doesn't bother us,
Or status thymico-lymphaticus;
But facing the necessity
Of treating an obesity
Is embarrassing because we are ourselves a bit rotund.
We see a carcinoma,
A large benign fibroma,
Interrupted oft by salesmen or collectors for some fund;
Comes a child micro-cephalic
And a man acromegalic;
We've rickets, hyperthyroid and neuritis on the roster.
We see a bad diplopia,
A very rare xanthopia,
An osteo-malacia and a painful herpes zoster;
Then asthma with its wheezes
And flu with coughs and sneezes.

We leave the office, get some food, rush forth and work some more,
Dispensing cheer and pills
For all of human ills,
From early in the morning until half the night is o'er.

We general practitioners,
As now we trust each one infers,
Have, as routine, only pleasure
Which we treasure beyond measure.
Life's dramatic, democratic, systematic and somatic,
Aromatic or traumatic, autocratic and dogmatic,
Diplomatic, oft rheumatic, from phlegmatic to ecstatic.

Throughout our daily routine we are cheery and are gay
Until at last we go to bed and call it all a day.

THE VALUE OF KNOX GELATINE IN PEPTIC ULCER MANAGEMENT

Many physicians are finding Knox Gelatine a practical aid in the frequent between-meal feedings that are so often desirable in the management of peptic ulcer.

Given at hourly intervals, Knox Gelatine provides a satisfactory control of the gastric secretions and brings relief from the painful symptoms.

Also, many physicians regularly prescribe the *Special Ulcer Diet* described in the Knox booklet, "Peptic Ulcer Dietary." This is a complete diet... bland, and liberal in calories and protein. We will be happy to send you as many copies as you wish.

For the free *Peptic Ulcer Dietary*... and any of the other dietaries listed here... address your request to Knox Gelatine, Box 483, Johnstown, N. Y.

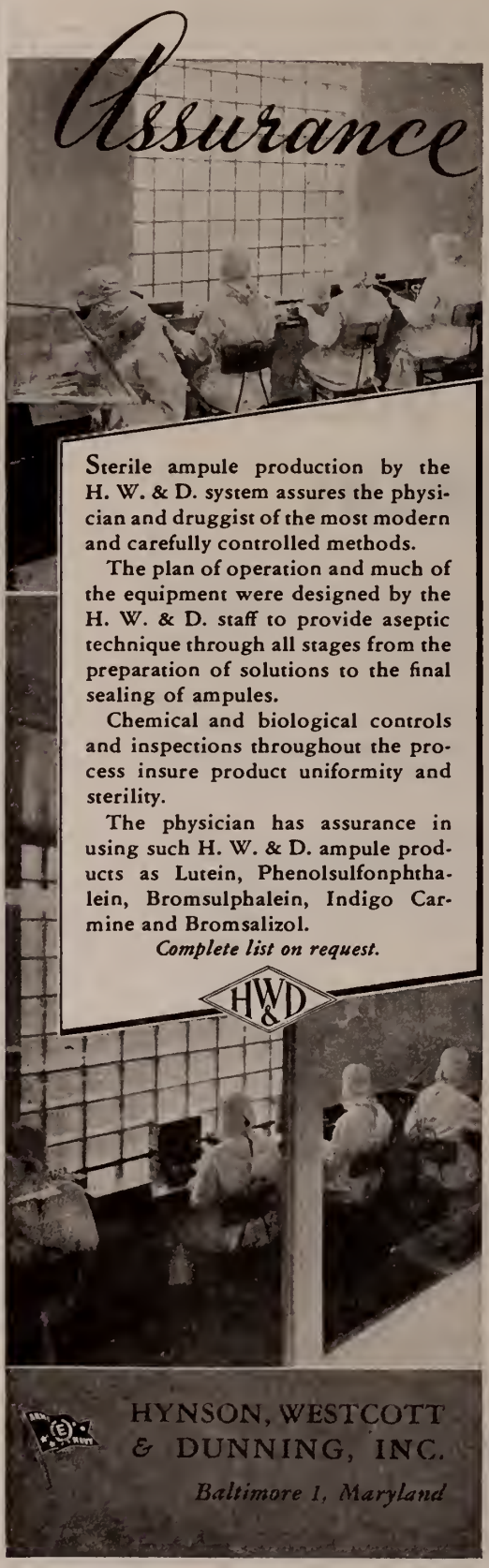
FREE!

Peptic Ulcer Dietary — **Diabetic Diets**
Knox Gelatine Drink — **Infant Feeding**
Feeding Sick Patients — **Reducing Diets and Recipes**
Protein Value of Plain, Unflavored Gelatine

KNOX GELATINE U. S. P.

PLAIN, UNFLAVORED GELATINE...ALL PROTEIN, NO SUGAR

Knox Products Keep Pace Through Laboratory and Clinical Research



Book Reviews

THE CARE OF THE NEUROSURGICAL PATIENT, Before, During and After Operation; By Ernest Sachs, A.B., M.D., Professor of Clinical Neurological Surgery, Washington University School of Medicine, Saint Louis. With 177 Illustrations Including Two in Color. The C.V. Mosby Company, St. Louis, 1945. Price $6.00.

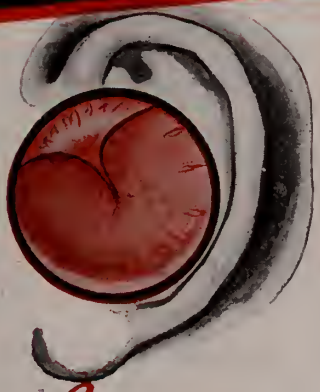
The author having devoted his time and energy during the past 35 years in the field of neurosurgery, has accumulated a great mass of knowledge which has aided him materially in the operative and postoperative stages in the care of his cases. Many small details in technique are carefully presented in this book for the benefit of those desiring to do neurosurgery, which the author believes may actually save lives if followed closely. The average textbook on general surgery usually fails to give these details, hence the desire on the part of Doctor Sachs to place special emphasis on them.

Much emphasis is placed on the preoperative diagnosis and methods by which the operator may be assured that he has arrived at the correct conclusions and is thoroughly aware of the type of surgery which is indicated. The careful history, examinations, and other tests, roentgenograms, etc., which are essential factors in making the diagnosis are described in much detail. Much attention is likewise given relative to the operating room, preparation of the operating team, type of anesthesia which is desired, and other details relative to the equipment which is necessary for the successful operation, and preparation for unusual complications which may arise.

In Chapter V the author has selected interesting cranial cases with the operative procedures that were employed, appropriate illustrations, some in color, to visualize certain features of the operations. In Chapter VI spinal and peripheral nerve operations are discussed with the technique that should be employed. As would be expected, dislocated nucleus pulposis with an interesting illustrative case presented in detail, is given careful consideration. The final chapters in this

(*Continued on page* 64)

Medications of Choice FOR THE SPECIFIC INVOLVEMENT



Auralgan

in ACUTE OTITIS MEDIA

Symptoms

Pain, fever, edema, leucocytosis, sense of fullness and impaired hearing.

Treatment

Relief of pain and inflammation—*Auralgan.*

Action

Decongestant, analgesic, bacteriostatic.

Scientific data and reprints of clinical studies reporting upon the use of Otosmosan available on request.



Otosmosan

in CHRONIC SUPPURATIVE OTITIS MEDIA

Symptoms

Persistent discharge, often foul smelling, usually no toxemia, no pain, no fever.

Treatment

Otosmosan.

Formula

Sulfathiazole carbamide 20% in glycerol (Doho).

Action

Deodorizes the discharge, liquifies unhealthy granulations, bacteriostatic, permits normal epithelialization.

Complimentary quantities for clinical trial

THE DOHO CHEMICAL CORPORATION

New York 13, N. Y. • Montreal • London

Redness • Itching • Fever • Vesiculation

TYPIFY

POISON IVY *and* POISON OAK DERMATITIS

For prophylaxis and treatment of this severe and prevalent type of contact skin eruption, Pitman-Moore Company offers

POISON IVY EXTRACT with ***Sterile Diluent***

AND

POISON OAK EXTRACT with ***Sterile Diluent***

ACCEPTED AMERICAN MEDICAL ASSN Council on Pharmacy and Chemistry

SUPPLIED in individual treatment packages; each containing 1 vial of a concentrated extraction in absolute alcohol, of the carefully dehydrated leaves of the plant (Rhus toxicodendron or Rhus diversiloba) so standardized that each cc. contains 1 mg. of the resinous extractive which contains the toxic principle of the plant. This concentrate is capable of producing the dermatitis upon contact with the skin of sensitive individuals.

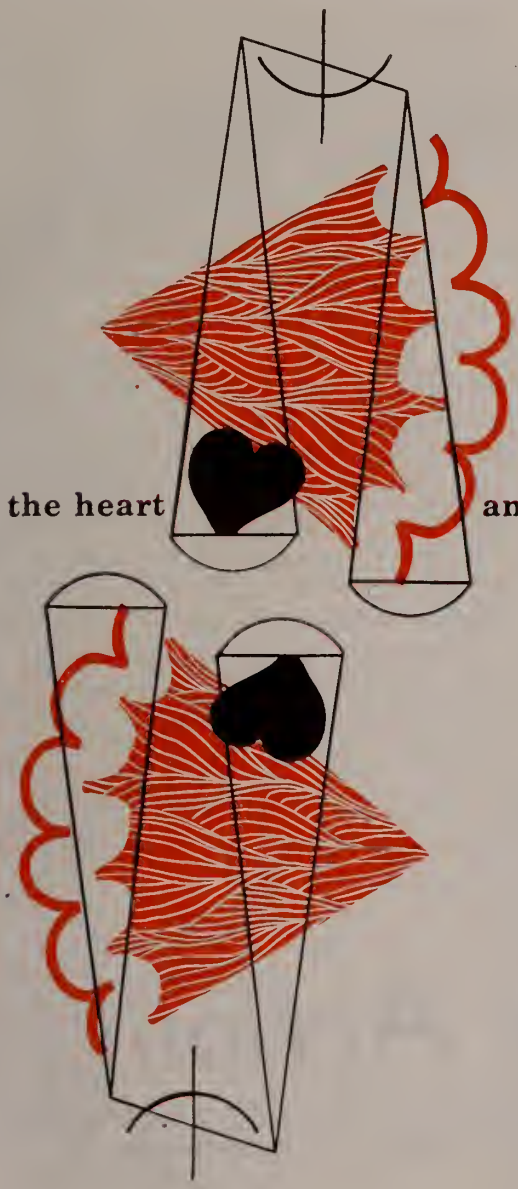
The package also contains separate vials of diluent, permitting the desired dilutions to be made immediately prior to use, thus offering the practical equivalent of fresh, extemporaneously prepared solution.

Complete literature to physicians upon request.

PITMAN-MOORE COMPANY

PHARMACEUTICAL AND BIOLOGICAL CHEMISTS

Division of Allied Laboratories, Inc., • Indianapolis 6, Indiana



the heart and the gastrointestinal tract

Cardiac patients whose hearts and cardiovascular systems are precariously balanced and taxed to the limit cannot risk the dangers and strains imposed by constipation.

'*Agarol*'* Emulsion may simply and successfully spare the patient the additional and at times menacing vascular burden caused by straining at stool.

'*Agarol*' Emulsion provides gentle, efficient relief of constipation by means of (1) retention of water for a soft, moist stool, (2) a lubricant substance similar to natural mucin and (3) minimum threshold stimulation of peristalsis.

William R. **WARNER** *and Co. Inc.* 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'agarol'

Emulsion of mineral oil and an agar-gel with phenolphthalein. Supplied in bottles of 6, 10, and 16 fluidounces.

*Trademark Reg. U. S. Pat. Off.

BOOK REVIEWS (Continued)

interesting book describe closure of wounds, post-operative care and a review of neurological surgery, with a glimpse into the future.

Doctor Sachs, himself a pioneer in this modern branch of surgery, has presented a book, well illustrated, which should be of much value to house officers and the many younger surgeons desiring to do this type of work.

DISEASES OF THE NOSE, THROAT AND EAR, INCLUDING BRONCHOSCOPY AND ESOPHAGOSCOPY. Edited by Chevalier Jackson, M.D., Sc.D., LLD., F.A.C.S. Honorary Professor of Broncho-Esophagology, Temple University, Philadelphia, and Chevalier L. Jackson, M.D., M.Sc., F.A.C.S. Professor of Broncho-Esophagology, Temple University, Philadelphia. With the Collaboration of Sixty-four Outstanding Authorities. 934 Illustrations on 581 Figures, Including 18 Plates in Color. W. B. Saunders Company, Philadelphia and London, 1946. Price $10.00.

This excellent volume is a large but extremely practical one in which the various phases of modern Otorhinolaryngology and Broncho-Esophagology are presented in a manner best suited to those interested in these specialties as specialists, teachers or general practitioners.

The Editors have chosen as collaborators sixty-four outstanding authorities whose reputations as teachers and clinicians is familiar to every practitioner and whose opinions are recognized as authoritative by all.

The text matter is arranged so as to be readily accessable, is not discussed at length but no essentials are omitted. Obsolete procedures have not been included and recent therapeutic adjuncts have been given emphasis according to their merits. The reader is not burdened with historical discussions which are usually so time consuming and of little interest to either the student or the busy practitioner.

The book is divided into eight parts:

Part I. Nose and Nasal Accessory Sinuses.

Part II. Mouth, Fauces, and Pharynx.

Part III. The Ear.

(*Continued on page 70*)

for Quick Action!

in the Respiratory and Circulatory Emergencies of Intravenous Barbiturate Anesthesia

inject Metrazol

COUNCIL ACCEPTED

1 to 3 cc. and repeat intravenously, intramuscularly, subcutaneously

Ampules 1 and 3 cc., tablets, solution, powder

collapse following accidents or surgical trauma · opiate and barbiturate depression · asphyxia · denarcotization after general anesthesia · circulatory and respiratory support in the emergencies of pneumonia . . . . . .

Metrazol, brand of pentamethylentetrazol, Trade Mark, reg. U. S. Pat. Off.

BILHUBER-KNOLL CORP. - - ORANGE, NEW JERSEY

NEW LAMINATED PELLET



FOR

PROPHYLAXIS AND THERAPY OF MULTIPLE VITAMIN DEFICIENCY

EACH PELLET CONTAINS



VITAMINS

Vitamin A From fish liver oil	5000 U.S.P. units
Vitamin B_1 Thiamine Hydrochloride	2 mg.
Vitamin B_2 Riboflavin	2 mg.
Vitamin B_6 Pyridoxine Hydrochloride	0.5 mg.
Calcium Pantothenate	1 mg.
Niacinamide	20 mg.
Vitamin C Ascorbic Acid	50 mg.
Vitamin D Chemically pure synthetic vitamin D_2 (calciferol) from ergosterol	1000 U.S.P. units

PLURAVIT...

Trademark Reg. U. S. Pat. Off.

Brand of MULTIPLE VITAMINS

• • SMALL, EASY TO SWALLOW, PLEASANT TASTING PELLETS, WITHOUT AFTER-TASTE.

WINTHROP CHEMICAL COMPANY, INC.
PHARMACEUTICALS OF MERIT FOR THE PHYSICIAN
NEW YORK 13, N. Y. WINDSOR, ONT.

111P



"The hormone of the mother"

Progesterone is the hormone of the mother and is indispensable for normal reproduction and gestation. Administered as PROLUTON by injection it helps maintain pregnancy threatened by miscarriage due to insufficient maternal hormone.

PROLUTON

In the presence of a history of habitual abortion, PROLUTON is frequently administered prophylactically as soon as the diagnosis of pregnancy is established. Four out of five women so treated are carried safely to term.[1,2]

PRANONE (anhydrohydroxy-progesterone), the orally active form of corpus luteum hormone, may be substituted for PROLUTON where oral therapy will serve most conveniently.

PROLUTON (progesterone) Ampules of 1, 2, 5, 10 mg.—Boxes of 3, 6 and 50.
PRANONE (anhydrohydroxy-progesterone) Tablets of 5, 10 mg.—Boxes of 20, 40, 100 and 250.

1. Mason, L. W.: Am. J. Obst. & Gynec. 44:630, 1942.
2. Soule, S. D.: Am. J. Obst. & Gynec. 42:1009, 1941.

TRADE-MARKS PROLUTON AND PRANONE—REG. U.S. PAT. OFF.

SCHERING

Schering CORPORATION · BLOOMFIELD, N. J.

IN CANADA, SCHERING CORPORATION LIMITED, MONTREAL



In chewing Aspergum, the patient releases a soothing flow of saliva laden with acetylsalicylic acid—bringing the analgesic into prolonged contact with pharyngeal areas which often are not reached, even intermittently, by gargling or irrigations.

The stimulation of muscular activity aids in the elimination of local spasticity and stiffness, increasing patient comfort, permitting an earlier ingestion of nourishing food, hastening convalescence.

INDICATIONS: Post tonsillectomy care; acute and chronic tonsillitis, pharyngitis, "scratchy throat" of influenza, "grippe," etc.

Ethically promoted--never advertised to the laity.

Dillard's

Aspergum

is most palatable . . . readily accepted by all . . . including children.

In packages of 16; moisture-proof bottles of 36 and 250 tablets.

PHARMACEUTICAL *White* MANUFACTURERS
LABORATORIES, INC.
NEWARK 7, N. J.

A FUNDAMENTAL PROBLEM IN



Geriatrics

REESTABLISHMENT OF PERISTALTIC NORMALCY

Gradual diminution of the digestive secretions is part of the physiological pattern of the life cycle. Unless diet is correspondingly restricted, indigestion and constipation may result, • PANCROBILIN TABLETS offer a valuable supplementary source of bile salts and pancreatic enzymes, fortified with small quantities of cascara sagrada, phenolphthalein and podophyllin, for use when patients are unwilling to subscribe to a lowered caloric intake, or become constipated on a restricted diet because of hypohepatia or hypopancreatism. This preparation gently stimulates the secretion of bile and pancreatic enzymes, and is a valuable supplementary source of these essential digestive factors, both in geriatrics and general practice. • The extract of cascara in PANCROBILIN TABLETS offers the advantages of a mild, nonhabit forming laxative, which acts promptly without griping; phenolphthalein has prolonged peristaltic action; and podophyllin is cholagogic.

FORMULA: *Each tablet contains:*

Extract of Ox Bile	3/4 gr.
Pancreas, desiccated	1/2 gr.
Extract of Cascara Sagrada	1/4 gr.
Phenolphthalein	1/8 gr.
Podophyllin	1/16 gr.

DOSAGE: *1 to 3 tablets as directed by physician.*

PACKAGING: *In bottles of 100, 500 and 1000.*

PANCROBILIN TABLETS

REED & CARNRICK

JERSEY CITY 6, NEW JERSEY • TORONTO, ONT., CAN.



When GROWTH DEMANDS AND APPETITE *Do Not Keep Step*

During periods of rapid growth, the greatly augmented nutritional requirements may not be completely satisfied. Thus a state of undernutrition may be engendered which can produce permanent damage to the organism. Since appetite may not keep step with nutritional need, special measures must frequently be taken to prevent metabolic damage.

Ovaltine proves an excellent food supplement for this purpose. Children enjoy its delightful taste, and drink it with relish, without coaxing. Made with milk as directed, it helps supply the very nutrients required when growth needs must be met: complete protein, readily utilized carbohydrate, easily emulsified fat, essential vitamins, and minerals including generous amounts of iron, as indicated by the table of composition below.

THE WANDER COMPANY, 360 N. MICHIGAN AVE., CHICAGO 1, ILL.



Ovaltine

Three daily servings of Ovaltine, each made of ½ oz. of Ovaltine and 8 oz. of whole milk,* provide.

CALORIES	669	VITAMIN A	3000 I.U.
PROTEIN	32.1 Gm.	VITAMIN B_1	1.16 mg.
FAT	31.5 Gm.	RIBOFLAVIN	1.50 mg.
CARBOHYORATE	64.8 Gm.	NIACIN	6.81 mg.
CALCIUM	1.12 Gm.	VITAMIN C	39.6 mg.
PHOSPHORUS	0.939 Gm.	VITAMIN D	417 I.U.
IRON	12.0 mg.	COPPER	0.75 mg.

*Based on average reported values for milk.

BOOK REVIEWS (Continued)

Part IV. Larynx and Hypopharynx.
Part V. Trachea and Bronchi.
Part VI. Esophagus.
Part VII. Foreign Bodies in the Air and Food Passages.
Part VIII. General Considerations.

In each the anatomy, etiology, pathology, symptoms, diagnosis, complications, treatment, sequelae and prognosis are discussed in a brief, intelligent and practical manner.

F.C.W.

CLINICAL TRAUMATIC SURGERY: By John J. Moorhead, B.S., M.D., D.Sc., F.A.C.S., (D.S.M.), Formerly Professor of Clinical Surgery, New York Post-Graduate Medical School, Columbia University, and Executive Officer, Department of Traumatic Surgery, Post-Graduate Hospital and Reconstruction Hospital Unit; Diplomate in Surgery; Colonel, Medical Corps (A.U.S.) Inac. Res.; Medical Director, New York City Transit System; Consulting Surgeon, Post Graduate Hospital, U. S. Public Health Service, All Souls (Morristown), Anne May Memorial (Spring Lake), Caledonian, Harlem, Mary Immaculate (Jamaica), Mother Cabrini, New Rochelle, Nyack, Rockland State, St. Francis (Port Jervis), and Yonkers General Hospitals. 747 pages with 500 illustrations. Philadelphia and London; F. B. Saunders Company, Philadelphia, 1945. Price $10.00.

It was the desire of the author in preparing this fine volume to place in one book all of the information necessary to diagnosis and treat most of the usual effects of accident and injury. Having been interested in traumatic surgery for more than 40 years, and drawing upon his accumulated experience of these years, he has indeed given the medical profession an unusual volume.

The ever increasing number of industrial accidents, as well as those occurring during modern warfare, make it more essential that more physicians endeavor to get all available information relative to this type of care. The author very modestly refers to his presence in Honolulu at the time of the Pearl Harbor attack, at which

(*Continued on page 72*)

Canichrome Capules
IMPROVED
Specifically designed for therapy in
Geriatrics

EACH CAPULE CONTAINS:
Calcium Pantothenate . . . . 10 mgs.
Thiamine . . . . . 2 mgs.
Riboflavin . . . . 2 mgs.
Niacinamide 10 mgs.

INCREASED POTENCY
The Amount of Calcium Pantothenate has been Tripled; Other Constituents Doubled.

NO PRICE INCREASE
℞ BOTTLES OF 90

NION CORPORATION NION LOS ANGELES 38, CALIF.

Your Advertisers

This is an index of those who serve the Medical Profession and support your journal. All advertisers are approved by your Journal Committee. It will help you to mention your Journal when writing them.

BODY SUPPORTS

The Spencer Corset Co., Inc., New Haven, Conn. .....
J. E. Hanger, Inc., Chicago 5 75

CLASSIFIED

Classified Advertisements 76

EQUIPMENT

General Electric X-Ray Corp., 2012 Jackson Blvd., Chicago 56

FINANCIAL AND INSURANCE

Crane Discount Corp., New York, N. Y. 74
Medical Protective Co., Fort Wayne, Ind. 3
Physicians Casualty Co., Omaha, Neb. 72

FOODS

American Meat Institute, Chicago, Ill. 30
Borden Company, 350 Madison Ave., New York 31
Coca Cola, Atlanta, Ga. .....
Knox Gelatin Laboratories, Johnstown, N. Y. 59
Mead Johnson & Co., Evansville, Ind. .. Inside Back Cover
National Confectioner's Ass'n., Chicago 2, Ill. 46
National Dairy Products, New York, N. Y. 15
Nestle's Milk Products, Inc. .....
Quaker Oats, Chicago, Ill. 51
Wander Company, 360 N. Michigan Ave., Chicago 69

PHARMACEUTICALS

Ames Co., Inc., Elkhart, Ind. .....
ArEx Cosmetics, Chicago 76
Ayerst McKenna & Harrison, Ltd., New York 16 13
Bilhuber-Knoll Corp., Orange, N. J. 64
Bristol Laboratories, Inc., Syracuse, N. Y. .....
Bristol-Myers Co., New York 45
Burroughs Wellcome & Co., New York 17, N. Y. 23
Ciba Company, Summit, N. J. 7
Crookes Laboratories, Inc., 305 E. 45th St., N. Y. 17, N. Y. 49
Doho Chemical Co., New York 61
Otis E. Glidden & Co., Evanston 44
Gold Pharmacal Co., New York 75
Harrower Laboratory, Chicago 1, Ill. 20
Hoffman-LaRoche, Inc., Nutley, N. J. 41
Holland-Rantos Co., Inc., 551 Fifth Ave., New York 55
Hynson, Westcott & Dunning, Charles and Chase Sts., Baltimore 60
International Vitamin Corp. .....
Irwin, Neisler & Co., Decatur, Ill. 18
Lanteen Medical Laboratories, Chicago 10 22
Thos. Leeming Co., 155 E. 44th St., N. Y. 17, N. Y. ....
Lilly, Eli & Co., Indianapolis, Ind. 38, 39, 40
Maltbie Chemical Co., Newark, N. J. 6
S. E. Massengill Co., Bristol, Tenn. 21
McNeil Laboratories, Inc., Philadelphia, Pa. 26
Merck & Co., Rahway, N. J. 54
Morris, Phillip & Co., 119 Fifth Ave., New York 14
National Oil Products Co. .....
Nion Corporation, Los Angeles, Calif. 70
Num Specialty Co., Pittsburgh, Pa. 74
Parke, Davis & Co., Detroit, Mich. 28
Pitman-Moore Co., Indianapolis 6, Ind. 62
Rare Chemicals, Inc., Flemington, N. J. 35
Reed & Carnrick, Jersey City 6, N. J. 68
Rees-Davis Drugs, Inc., Meriden, Conn. 53
Reynolds & Co., R. J., Winston-Salem 47
Riedel-de Haen, Inc., New York City 57
A. H. Robins Co., Richmond 19, Va. 48
Roche-Organon, Inc., Nutley, N. J. 34
J. B. Roerig & Co., 536 Lake Shore Drive, Chicago .. 10, 11
Schenley Laboratories, Inc. 32
Schering Corporation, Bloomfield, N. J. 17, 66
Julius Schmid, Inc., 423 W. 55th St., New York City .. 27
G. D. Searle & Co., P. O. Box 5100, Chicago ..... Inside Front Cover
Sharp & Dohme, 111 N. Canal St., Chicago 50
Smith, Kline & French 33
E. R. Squibb & Sons, New York 25
Frederick Stearns & Co., Detroit 8
United Rexall Drug Co. 52
Upjohn Co., Kalamazoo, Mich. 24
U. S. Standard Products, Woodworth, Wisc. 29
U. S. Vitamin Corp., 250 E. 43rd St., New York 17, N. Y. 42
Walker Vitamin Products, Inc., Mount Vernon, New York .....
Wm. R. Warner & Co., 113 W. 18th St., New York 9, 16, 63
Warren-Teed Products Co., Columbus 8, Ohio 36
Winthrop Chemical Co., 70 Varick St., New York 65
White Laboratories, Inc., Newark, N. J. 4, 5, 12, 67
Whittaker Laboratories, Inc., New York City 37
Wyeth, Inc., Philadelphia 19, 43
Zemmer Co., Pittsburgh, Pa. 76

SANATORIA AND SANITARIA

Costeff Sanitarium, Peoria, Ill. 74
Edward Sanatorium, Naperville, Ill. 72
Kenilworth Sanitarium, Kenilworth, Ill. 73
Michell Sanatorium, Peoria, Ill. 73
Milwaukee Sanitarium, Wauwatosa, Wis. ..... Back Cover
Norbury Sanatorium, Jacksonville, Ill. 72
North Shore Health Resort, Winnetka 75
Mary E. Pogue School, Wheaton, Ill. 74
Stokes Sanitarium, Louisville, Ky. 76
Weirick's Sanitarium, Elgin, Ill. 76

SCHOOLS

Washington University School of Medicine, St. Louis 10, Mo. 37

RADIUM

Central X-Ray & Clinical Laboratory, 58 E. Washington St., Chicago, Ill. 75
Physicians Radium Assn., 55 E. Washington St., Chicago 73

The NORBURY SANATORIUM

JACKSONVILLE, ILLINOIS — INCORPORATED and LICENSED

For the Treatment of Nervous and Mental Disorders

DR. ALBERT H. DOLLEAR, Superintendent
DR. FRANK GARM NORBURY, Medical Director
DR. SAMUEL N. CLARK, Physician
DR. HENRY A. DOLLEAR, Associate Physician
DR. FREDERICK A. CAUSEY, Associate Physician in Residence

Address Communications — THE NORBURY SANATORIUM, Jacksonville, Illinois

ACCIDENT - HOSPITAL - SICKNESS

INSURANCE

FOR PHYSICIANS, SURGEONS, DENTISTS EXCLUSIVELY

ALL PREMIUMS COME FROM — PHYSICIANS SURGEONS DENTISTS — ALL CLAIMS GO TO

$5,000.00 accidental death $25 weekly indemnity, accident and sickness	**$8.00** Quarterly
$10,000.00 accidental death $50 weekly indemnity, accident and sickness	**$16.00** Quarterly
$15,000.00 accidental death $75 weekly indemnity, accident and sickness	**$24.00** Quarterly

ALSO HOSPITAL EXPENSE FOR MEMBERS, WIVES AND CHILDREN

86c out of each $1.00 gross income used for members' benefit

$2,800,000.00 INVESTED ASSETS — **$13,000,000.00 PAID FOR CLAIMS**

$200,000.00 deposited with State of Nebraska for protection of our members.

Disability need not be incurred in line of duty—benefits from the beginning day of disability

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION

43 years under the same management
400 First National Bank Building — OMAHA 2, NEBRASKA

BOOK REVIEWS (Continued)

time he went to work with the medical officers in the field to care for those injured during this unwarranted and unexpected attack.

As would be expected in a volume such as this, careful consideration is given to injuries in general, standard technics, shock and its modern management, the care of wounds of all parts of the human body, and the care of secondary infections. Injuries of the head, abdomen, chest and back are given the careful consideration which they deserve, and a wealth of material is contained in these chapters.

The subject of fractures, dislocations and injuries to joints are likewise considered in much detail. In addition to the fine chapter on war injuries, the reader is given much information concerning such subjects as traumatic neuroses, medicolegal phases of trauma, compensation problems, and malpractice suits. This fine book should indeed become a very popular one throughout the nation, as more physicians today than ever before are interested in the many problems and desired technics in caring for the injured in industrial or private practice. With the 500 illustrations in this volume of 700 pages, the

Edward Sanatorium

NAPERVILLE, ILLINOIS
(30 miles west of Chicago)
Est. 1907 by Dr. Theodore B. Sachs

FOR THE TREATMENT OF TUBERCULOSIS

MEDICAL STAFF

Jerome R. Head, M.D.—Medical Director
Frank Seligson, M.D.—Medical Superintendent

Ideally situated — beautiful landscaped surroundings — modern buildings and equipment
A-A rating by Illinois Department of Health

For detailed information apply to—

Chicago Office of Edward Sanatorium — 343 S. Dearborn St., Chicago, Wabash 8111

NERVOUS and MENTAL DISEASES

FOR MILD CASES *FOR SEVERE CASES*

MICHELL FARM — **MICHELL SANATORIUM**

Licensed by State of Illinois

George W. Michell, M.D., Medical Director

INFORMATION ON REQUEST

106 North Glen Oak Ave., Ph. 3-5179, Peoria, Ill

Chicago Office:

46 East Ohio Street . . . Phone Delaware 6770



BOOK REVIEWS (Continued)

reader will find much of value to him in his every-day routine work.

HEMATOLOGY for Students and Practitioners: By Willis M. Fowler, A.B., M.D. Professor of Internal Medicine, University of Iowa, Iowa City, with a chapter by Elmer L. Degowin, A.B., M.D., Assistant Research Professor of Medicine, University of Iowa, Iowa City. Paul B. Hoever, Inc., Medical Book Dept. of Harper & Brothers, New York 16, New York; 499 pages; 110 illustrations. Price $8.00.

The author states that Hematology is a part of internal medicine, rather than an abstract science or a specialty in itself. The book is the outgrowth of a series of mimeographed notes, with a collection of drawings, charts and photomicrographs used by the author in his capacity as professor of internal medicine at the University of Iowa Medical School.

Beginning with a study of the hematopoetic system, the author in much detail presents the normal components of blood, giving careful consideration to each type of cells found there. A complete classification and general discussion of

(*Continued on page* 74)

Radium Rental Service

By

THE PHYSICIANS RADIUM ASSOCIATION

Organized for the purpose of making radium available to physicians to be used in the treatment of their patients. Radium loaned to physicians at moderate rental fees, or patients may be referred to us for treatment if preferred.

The Physicians Radium Association

Room 1307—55 East Washington St., Pittsfield Bldg., CHICAGO 2, ILL.

Telephones: Central 2268-2269

Wm. L. Brown, M.D., Director

Kenilworth Sanitarium

Resident Staff
EDWARD J. KELLEHER, M. D.
Director
RICHARD D. HUFF, M. D.
Associate

Consultant Staff
THOMAS L. FENTRESS, M. D.
HARRY R. HOFFMAN, M. D.
SAMUEL H. KRAINES, M. D.
WILLIAM J. NOLAN, M. D.

A PRIVATE SANITARIUM FOR THE CARE AND TREATMENT OF MENTAL AND NERVOUS ILLNESSES, ALCOHOLISM AND DRUG ADDICTIONS

2228 BEECHWOOD AVE., WILMETTE, ILL.

Mailing address:
P. O. Box 600
Kenilworth, Ill.

Telephones
Wilmette 351
Wilmette 1662

Social & Educational Adjustment

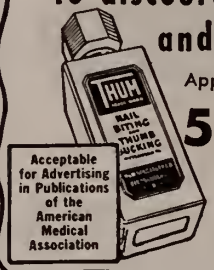
for exceptional children of all ages. Visit the school noted for its work in educational development and fitting such children for more normal living. Beautiful grounds. Home atmosphere. Separate buildings for boys and girls. Get catalogue.

The MARY E. POGUE SCHOOL

112 GENEVA ROAD WHEATON, ILL.
(NEAR CHICAGO)

RECOMMEND THUM

to discourage thumb-sucking and nail biting



Apply like nail polish

50¢ at all drug-stores $1.00

Acceptable for Advertising in Publications of the American Medical Association

THUM contains extract of capsicum (2.34%) in a base of acetone nail lacquer and isopropyl alcohol.

BOOK REVIEWS (Continued)

anemia follows, with special chapters on pernicious anemia and related macrocytic anemies, iron deficiency anemias, aplastic anemia, as well as those due to blood loss.

Careful consideration is given to the many special types of anemias with the characteristic blood findings in each, to increase the value of the book to the student as well as to the physician himself. The blood picture in many types of infections is likewise presented, as well as a great amount of information on transfusions of whole blood and blood derivatives.

With the ever increasing knowledge concerning disturbances of the hematopoetic system, and the value in clinical medicine of careful considerations of the blood counts and unusual variations in the cellular elements found so frequently today, the book should be a welcomed addition to any physician's library. The many fine illustrations, quite a number in color, add materially to the value and interest in the book. Surely this is a valuable addition to the library of physicians as well as students desiring adequate knowledge on this ever increasing in importance modern medical subject.

Clinical Biochemistry: By Abraham Cantarow, M.D., Professor of Physiological Chemistry, Jefferson Medical College; formerly Associate Professor of Medicine, Jefferson Medical College, and Assistant Physician, Jefferson Hospital; and Max Trumper, Ph.D., Lt. Comdr., H(S) USNR, Naval Medical Research Institute, National Naval Medical Center, Bethesda, Md.; formerly in charge of the Laboratories of Biochemistry of the Jefferson Medical College and Hospital. Third edition, Revised. 647 pages with 29 illustrations. Philadelphia and London: W. B. Saunders Company, 1945. Price $6.50.

The first edition of this book appeared in 1932, the second in 1939, and this, the third edition, has been brought out to include the progress in biochemistry made during the last five years. Many new and important subjects are included, such as the intravenous glucose tolerance test,

COSTEFF SANITARIUM

Mental and Nervous Disorders
Alcoholism and Drug Addiction

- **SHOCK TREATMENT** (Insulin, Metrazol Electro-shock) administered in suitable cases.
- **ARTIFICIAL FEVER THERAPY**

Home like environment, individual attention. MODERATE RATES.

Licensed by the State of Illinois

HARRY COSTEFF, M. D., Medical Director
1109 NO. MADISON AVE., PEORIA, ILL.
Phone 4-0156 Literature on request.

POST WAR COLLECTIONS

Our Post War Plan is a friendly aid to patients in paying past due medical bills as they change from war pay to peace pay. Protect your fees by acting now. Write. Our local auditor will call and tell you all about it.

CRANE DISCOUNT CORPORATION

230 W. 41 St. New York 18, N. Y.



FULLY APPROVED BY THE
AMERICAN COLLEGE OF SURGEONS

NORTH SHORE HEALTH RESORT

WINNETKA, ILLINOIS

on the Shores of Lake Michigan

A completely equipped sanitarium for the care of
nervous and mental disorders, alcoholism and drug addiction
offering all forms of treatment, including electric shock

Samuel Liebman, M.S., M.D.
Medical Director

225 Sheridan Road Phone Winnetka 211

insulin tolerance test, creatine tolerance test, the secretin test in the study of pancreatic function, classification of jaundice, new methods for the study of vitamin deficiencies, and many other highly important studies along biochemical lines made during recent years.

The book is intended to correlate established facts with problems encountered daily in the practice of medicine, give critical consideration to the alterations in the internal environment of the human body by specific changes in tissue and organ physiology. It would be impossible for the average practitioner of medicine to review the voluminous literature of biochemical advances, their relation to normal and abnormal physiology and their applications to clinical medicine. Therefore the authors have endeavored to bridge the gap between biochemistry or physiology and clinical medicine.

Complete information is given relative to the broad subject of metabolism, carbohydrate, protein, lipid, calcium, phosphorus, iron, etc., water and acid base balance, the respiratory exchange and basal metabolism, vitamins, diabetes mellitus, renal function, hepatic function, gastric function,

(*Continued on page 76*)

Radium Rental
Prompt Service

Deep X-Ray & Radium Therapy

Central X-Ray & Clinical Laboratory

F. F. Schwartz, M.D., Director
58 E. Washington St., Dear. 6811
CHICAGO, ILL.

J. E. HANGER, inc.

1112 S. Michigan Ave. Chicago 5, Ill.
Phone Wab. 1135
1912 Olive St. St. Louis 3, Mo.
Phone CEntral 1088-1089

DURALUMIN AND ENGLISH WILLOW LIMBS
MECHANICAL ARMS
TRUSSES CANES CRUTCHES
INVALID CHAIRS

Illustrated Catalog Sent on Request

in whooping cough

ELIXIR BROMAURATE

IS A UNIQUE REMEDY OF UNIQUE MERIT

Cuts short the period of illness and relieves the distressing spasmodic cough. Also valuable in Bronchitis and Bronchial Asthma.
In four-ounce original bottles. A teaspoonful every 3 to 4 hours.

Prescribed by Thousands of Doctors

GOLD PHARMACAL CO. NEW YORK CITY

Lozenges
SULFATHIAZOLE 2½ GR.
ZEMMER

Sulfathiazole	2½gr.
Benzocaine	1/10gr.
Oil Wintergreen	q.s.

Chemists to the Medical Profession

THE ZEMMER COMPANY, OAKLAND STATION, PITTSBURGH 13, PA.



IL-3-46

MORPHINE AND OTHER DRUG ADDICTIONS
Selected patients who wish to make good and learn how to keep well; methods easy, regular, humane. Dr. Weirick's Sanitarium. Elgin. Ill.

THE STOKES SANITARIUM 923 Cherokee Road, Louisville, Kentucky

Our **ALCOHOLIC** treatment destroys the craving, restores the appetite and sleep, and rebuilds the physical and nervous condition of the patient. Liquors withdrawn gradually, no limit on the amount necessary to prevent or relieve delirium.

MENTAL patients have every comfort that their home affords.

The **DRUG** treatment is one of gradual Reduction. It relieves the constipation, restores the appetite and sleep: withdrawal pains are absent. No Hyoscine or rapid withdrawal methods used unless patient desires same.

NERVOUS patients are accepted by us for observation and diagnosis as well as treatment.

E. W. STOKES, Medical Director, Established 1904.
Telephone—Highland 2101

Classified Ads

RATES FOR CLASSIFIED ADVERTISEMENTS—For 30 words or less: 1 insertion, $3.00; 3 insertions, $8.00; 6 insertions, $14.00; 12 insertions, $24.00; from 30 to 50 words: 1 insertion, $4.00; 3 insertions, $10.50; 6 insertions, $20.00; 12 insertions, $30.00. Extra words: 1 insertion, 10c each; 3 insertions, 25c each; 6 insertions, 40c each; 12 insertions, 50c each. A fee of 25c is charged for those advertisers who have answers sent care of the Journal. Cash in advance must accompany copy.

FOR SALE: 20 bed hospital, with all electrical equipment, and X-ray machine. Delivery room and nursery for obstetrical patients. Brick building, large territory, well established, located in Metropolis, Illinois, a city of 7000 population, surrounded by factories and good farming country. Can be bought at a reasonable price. Mrs. J. A. Fisher, Metropolis, Illinois.

FOR SALE: Private practice. Un-opposed. Essential area Minnesota Catholic Community. Population 2000. Five room office. Fully equipped. Hospital facilities. Present doctor leaving on account of health. Write full particulars Box 122, Illinois Medical Journal, 30 N. Michigan, Chicago 2.

FOR SALE: Drugs & Equipment, brick building kept modern, 6 & 7 room apts. English basement for office, heated garage. Practiced in same location for 40 years. J. B. Ross M.D., 2030 Irving Park Road, Chicago 18, Illinois.

ESTABLISHED HOSPITAL FOR LEASE: A sanitarium for nervous, mental, alcoholic and drug cases, to a reputable physician or medical group. Doing an excellent business. Dr. E. W. Stokes, 923 Cherokee Road, Louisville 4, Kentucky.

WANTED: Physician to serve as medical director for 35 bed tax supported tuberculosis sanatorium in middle west. Salary and maintenance. State qualifications and experience. Box 123, Illinois Medical Journal, 30 N. Michigan, Chicago 2.

FOR SALE: A Bausch & Lomb microscope without mechanical stage. Purchased in 1939. Perfect condition. Also hand centrifuge. R. E. Valentine, M.D., Tallula, Illinois.

WANTED: Residents in psychiatry, $1800 to $2400 a year; public health physicians, $3720 to $4320 a year; physicians, $3720 to $4320 a year; tuberculosis control physicians, $4320 to $5280 a year; psychiatrists, $4320 to $5280 a year; clinical directors, $5280 to $5940 a year. Illinois Dept. of Public Welfare, 176 W. Adams St., Chicago 3, Illinois.

WANTED: Laboratory helpers, $1260 to $1840 a year; laboratory technicians, $1560 to $1980 a year; laboratory technicians, $1800 to $2400 a year; x-ray technicians, $2100 to $2640 a year. Illinois Dept. of Public Welfare, Chicago 3, Illinois.

BOOK REVIEWS (Continued)

pancreatic function, cerebrospinal fluid and biochemical changes in pregnancy and lactation.

Present day knowledge concerning hormone assay and endocrine function are outlined and discussed in an excellent manner. The final chapter on outline of chemical abnormalities in various disorders will be of much interest to the average reader.

The gaps between biochemistry or physiology, pathology and their importance as considerations in clinical medicine are well brought out in the book, and it will unquestionably be of much interest and value to many present day practitioners of medicine.

Books Received

The following books have been received for reviewing, and are herewith acknowledged. This listing should be considered as a sufficient return for the courtesy of the sender. Books that appear to be of unusual interest will be reviewed as space permits each month. Readers desiring additional information relative to books listed, may write the Editor who will gladly furnish same promptly.

VARICOSE VEINS OF THE LOWER EXTREMITY; By Anthony M. Barone, M.D., Chicago, Illinois; 51 pages; illustrated.

PRINCIPLES OF DYNAMIC PSYCHIATRY: By Jules Masserman, M.D., Division of Psychiatry, Department of Medicine, University of Chicago. 322 pages with 4 plates. Philadelphia & London: W. B. Saunders Company, 1946. Price $4.00.

HOWELL'S TEXTBOOK OF PHYSIOLOGY (Fifteenth Edition): Edited by John F. Fulton, M.D., Sterling Professor of Physiology, Yale University School of Medicine. 1304 pages with 507 illustrations. Philadelphia and London: W. B. Saunders Company, 1946. Price $8.00.

FREE SAMPLE
DR. .....
ADDRESS .....
CITY .....
STATE .....

℞ AR-EX SOAP

Superfatted with CHOLESTEROL
Contains No Lanolin
Prescribed by many dermatologists and allergists in sensitive, dry skin, and contact dermatitis. YOUR DRUGGIST HAS IT OR CAN GET IT FOR YOU.



AR-EX COSMETICS, INC., 1036 W. VAN BUREN ST., CHICAGO 7, ILL.



The rooster's legs are straight.

The boy's are not.

The rooster got plenty of vitamin D.

Fortunately, extreme cases of rickets such as the one above illustrated are comparatively rare nowadays, due to the widespread prophylactic use of vitamin D recommended by the medical profession.

One of the surest and easiest means of routinely administering vitamin D (and vitamin A) to children is MEAD'S OLEUM PERCOMORPHUM WITH OTHER FISH-LIVER OILS AND VIOSTEROL. Supplied in 10-cc. and 50-cc. bottles. Also supplied in bottles of 50 and 250 capsules. Council Accepted. All Mead Products Are Council Accepted.

MEAD JOHNSON & COMPANY, EVANSVILLE 21, INDIANA, U. S. A.

N Y Acad of Med
5 Ave & 103rd St
New York N Y
Exch



COLONIAL HALL
One of the 14 Units in "Cottage Plan"

FOR NERVOUS DISORDERS

MAINTAINING the highest standards for more than a half century, the Milwaukee Sanitarium stands for all that is best in the care and treatment of nervous disorders. Photographs and particulars sent on request.

Josef A. Kindwall, M. D.
Carroll W. Osgood, M. D.
William T. Kradwell, M. D.
Merle Q. Howard, M. D.
Lewis Danziger, M. D.
Russell C. Morrison, M. D.
Arthur J. Patek, M. D.

G. H. Schroeder
Business Manager

MILWAUKEE SANITARIUM

WAUWATOSA—WISCONSIN

PHYSICIAN'S CHICAGO OFFICE—1117 Marshall Field Annex—Wednesdays, 1-3 P.M.—Central 1162

The ILLINOIS Medical Journal

THE NEW YORK ACADEMY OF MEDICINE
MAY 21 1946
LIBRARY

VOL. 89 NO. 4

April, 1946

In This Issue

Preliminary Program

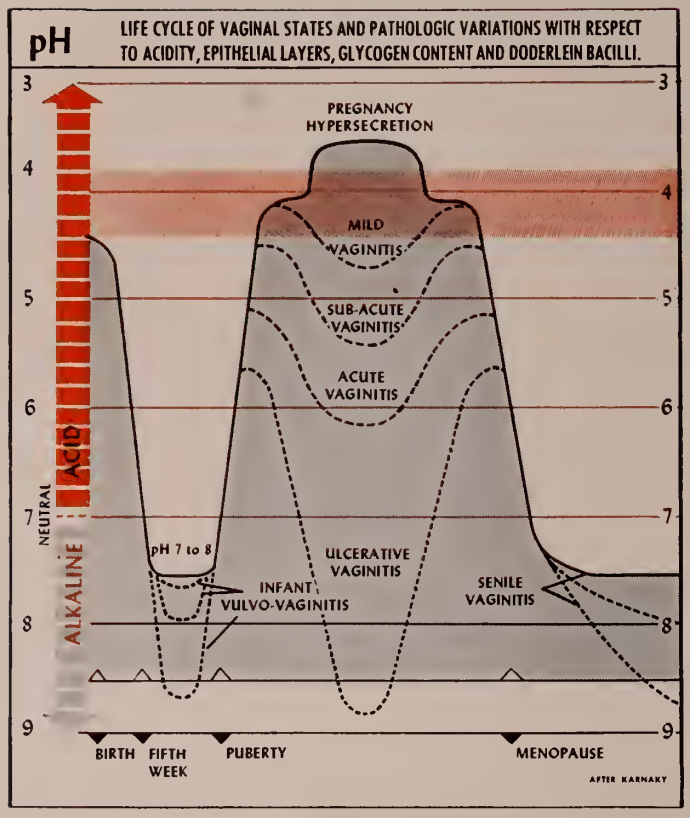
ANNUAL MEETING, ILLINOIS STATE MEDICAL SOCIETY
PALMER HOUSE, CHICAGO, MAY 14, 15, 16, 1946

Herniation of the Intervertebral Disc

(See page 37 for complete Table of Contents)

OFFICIAL JOURNAL OF THE ILLINOIS STATE MEDICAL SOCIETY

REHABILITATES VAGINAL MUCOSA...



Desquamation of vaginal epithelium, due to inflammatory reaction, is frequently encountered in acute, subacute and chronic vaginitis.

Floraquin allays such inflammatory conditions; destroys pathogenic organisms; provides carbohydrates for the restoration of mucosal glycogen; facilitates regeneration of vaginal epithelium; restores the normal vaginal pH—thus aiding reestablishment of the normal vaginal flora.

Floraquin—a product of Searle Research—contains the nontoxic protozoacide, Diodoquin, together with adequate lactose, dextrose and boric acid to adjust and to maintain the pH at approximately 4.0 when mixed with vaginal secretions.

Floraquin and Diodoquin are the registered trademarks of G. D. Searle & Co., Chicago 80, Illinois

SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

Entered as Second-Class Matter July 21, 1919, at the Post Office, Oak Park, Illinois, under the Act of March 8, 1879. Acceptance for mailing at special rate of postage provided for in Section 1102, Act of October 8, 1917, authorized July 15, 1918. Office of Publications, 715 Lake Street, Oak Park, Ill.

The Intrinsic Ingredient . . .

Every exceptional product or service has an intrinsic ingredient without which it would become dross or ordinary.

in Professional Protection

Specialized Service—our exclusive application to this one field—brings that extra "know how" to the defense of malpractice actions which has always distinguished Medical Protective. It is the Intrinsic Ingredient.



The

Medical Protective Company

of

Fort Wayne, Indiana

Redness • Itching • Fever • Vesiculation

TYPIFY

POISON IVY *and* POISON OAK DERMATITIS

For prophylaxis and treatment of this severe and prevalent type of contact skin eruption, Pitman-Moore Company offers

POISON IVY EXTRACT with *Sterile Diluent*

AND

POISON OAK EXTRACT with *Sterile Diluent*

ACCEPTED AMERICAN MEDICAL ASSN Council on Pharmacy and Chemistry

SUPPLIED in individual treatment packages; each containing 1 vial of a concentrated extraction in absolute alcohol, of the carefully dehydrated leaves of the plant (Rhus toxicodendron or Rhus diversiloba) so standardized that each cc. contains 1 mg. of the resinous extractive which contains the toxic principle of the plant. This concentrate is capable of producing the dermatitis upon contact with the skin of sensitive individuals.

The package also contains separate vials of diluent, permitting the desired dilutions to be made immediately prior to use, thus offering the practical equivalent of fresh, extemporaneously prepared solution.

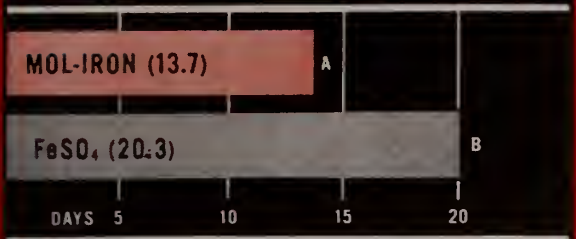
Complete literature to physicians upon request.

PITMAN-MOORE COMPANY

PHARMACEUTICAL AND BIOLOGICAL CHEMISTS

Division of Allied Laboratories, Inc., • Indianapolis 6, Indiana

Rapidity of Clinical Response



(A) Completely effective therapeutic response (return to normal blood values) was obtained in an average of 13.7 days of Mol-Iron therapy.

(B) Ferrous sulfate therapy *failed* to produce normal hemoglobin values after an average of 20.3 days.

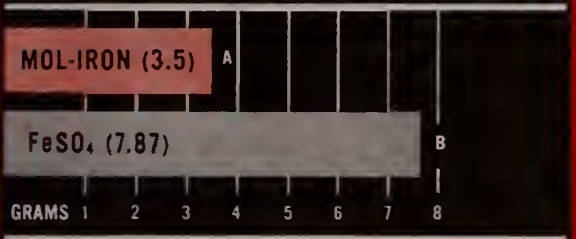
Average Daily Hemoglobin Increase



(A) The group treated with Mol-Iron averaged a daily hemoglobin increase of 2.48 per cent (0.36 Gm. per cent).

(B) The group treated with ferrous sulfate showed an average daily gain of hemoglobin of 0.83 per cent (0.12 Gm. per cent)—a response about one-third as effective.

Therapeutic Intake of Bivalent Iron



(A) The Mol-Iron treated group received an average total of 3.528 Gms. of bivalent iron to produce the sought for result (return to normal blood values).

(B) While an average ingestion of 7.871 Gms. of bivalent iron failed to achieve an optimal response in the ferrous sulfate treated group.

The charts summarize the results of a controlled study of comparative therapeutic response in post-hemorrhagic and nutritional hypochromic anemias.

The series includes 49 cases treated with Mol-Iron and 21 with exsiccated ferrous sulfate; the results are typical of those observed in treatment of iron-deficiency anemias with White's Mol-Iron.

A DEFINITE ADVANCE IN TREATMENT OF HYPOCHROMIC ANEMIA

White's MOL-IRON TABLETS

As compared with ferrous sulfate given in equivalent dosage—

1. Normal hemoglobin values are found to be restored more rapidly with White's Mol-Iron. Daily rate of hemoglobin formation may be *increased as much as 100% or more.*
2. Iron utilization is similarly more complete.
3. Gastrointestinal tolerance is notably satisfactory—even where other iron preparations have previously been poorly tolerated.

INDICATIONS: Hypochromic (iron-deficiency) anemias caused by inadequate dietary intake or impaired intestinal absorption of iron; excessive utilization of iron, as in pregnancy and lactation; chronic hemorrhage.

DOSAGE: One or two tablets three times daily after meals.

Available in bottles of 100 and 1000 tablets.

Ethically promoted—not advertised to the laity.

PHARMACEUTICAL White LABORATORIES, INC. NEWARK 7, N. J. MANUFACTURERS



Therapeutic VICTORIES . .

IMPROVING collateral coronary circulation – especially during acute and subacute phases – may, in large measure, account for the "therapeutic victories" of the clinician today in the management of coronary heart disease.

Toward this end, Maltbie's Calpurate – with its powerful coronary-dilating, myocardial-stimulating and diuretic actions – is increasingly preferred . . . particularly because it is so remarkably free from gastric side-effects. Its salts, being almost insoluble in the stomach and readily absorbed by the intestine, are said to be "least likely to cause distress."

FORMULA: Calcium theobromine–calcium gluconate in molecular proportions.
PACKAGED: as tablets (each containing 7½ gr. calcium theobromine – calcium gluconate) in bottles of 100, 500 and 1000 – or as powder in 1 oz. bottles.
ALSO AVAILABLE with ¼ gr. phenobarbital per tablet when sedation is desired.

THE MALTBIE CHEMICAL COMPANY • NEWARK, NEW JERSEY

CALPURATE

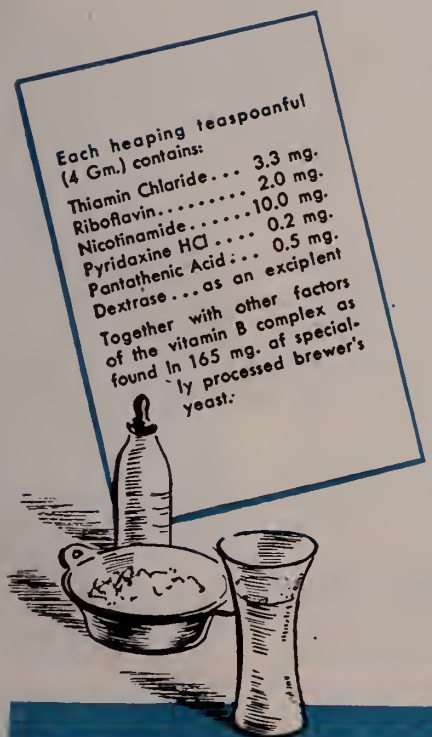
FOR TODAY'S CARDIOVASCULAR PATIENT



• We had your young patients in mind . . . the infant on a formula and the child who has difficulty taking capsules or tablets . . . when we developed these readily soluble, palatable *granules* of VITAMIN B COMPLEX—a preparation which lends itself to flexibility of dosage as required in pediatric practice.

• "BEMINAL" Granules may be added to the baby's formula, sprinkled on cereal, or dissolved in fruit juices, milk or any other liquid. Older children may prefer to take them dry.

Available in bottles of 4 ounces.



"BEMINAL" Granules, No. 925

REG. U. S. PAT. OFF.

Ayerst

AYERST, McKENNA & HARRISON LIMITED, 22 E. 40th Street, New York 16, N. Y.

prevention

OF SECONDARY POST-TONSILLECTOMY HEMORRHAGE WITH

White's

SULFATHIAZOLE GUM*

"A preliminary study of the routine use of sulfathiazole gum after tonsillectomy indicated a reduction in the incidence of secondary hemorrhage. In addition, the gum appeared to exert a favorable effect on the healing of the pharyngeal wound."

—McGovern, F. H.: Arch. Otolaryngology, 40:196-197 (Sept.) 1944.

When a single tablet of pleasantly flavored Sulfathiazole Gum is chewed for one-half to one hour it provides a high salivary concentration of *locally active* sulfathiazole averaging 70 mg. per cent. Moreover, resultant blood levels of the drug, even with maximal dosage, are so low (rarely reaching 0.5 to 1 mg. per cent) that systemic toxic reactions are virtually obviated.

INDICATIONS:

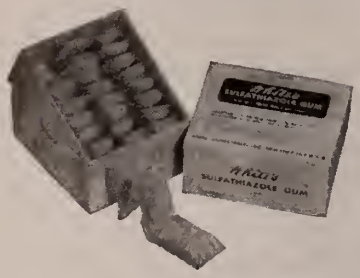
Local treatment of sulfonamide-susceptible infections of oropharyngeal areas; acute tonsillitis and pharyngitis—septic sore throat—infectious gingivitis and stomatitis—Vincent's infection. Also indicated in the prevention of local infection secondary to oral and pharyngeal surgery.

DOSAGE:

One tablet chewed for one-half to one hour at intervals of one to four hours depending upon the severity of the condition. If preferred, several tablets—rather than a single tablet—may be chewed *successively* during each dosage period without significantly increasing the amount of sulfathiazole systemically absorbed.

AVAILABLE

in packages of 24 tablets, sanitaped, in slip-sleeve prescription boxes.



IMPORTANT:

Please note that your patient requires your prescription to obtain this product from the pharmacist.

A PRODUCT OF

WHITE LABORATORIES, INC.

PHARMACEUTICAL MANUFACTURERS, NEWARK 7, N. J.

Cryptorchidism

Undescended testes are exposed to several hazards —atrophy, sterility, torsion and malignant degeneration. Even if these unfortunate complications do not eventuate, the very existence of cryptorchidism may be responsible for or contribute toward psychic disturbances in adolescence.



PRANTURON

Administration of PRANTURON, chorionic gonadotrophin, at an early age often causes the cryptorchid organ to assume its natural position and thereby promotes somatic and emotional readjustment.

PRANTURON is available in two strengths as a stable powder in multiple dose vials to permit flexibility in dosage, each vial containing 5,000 I.U. or 10,000 I.U. of dry, highly purified hormone of pregnancy urine. When diluted with the sterile diluent provided, solutions of 500 I.U. per cc. or 1,000 I.U. per cc. are obtained. Packaged in boxes of one vial.

Trade-Mark PRANTURON—Reg. U. S. Pat. Off.

SCHERING

Schering CORPORATION · BLOOMFIELD · N. J.

In Canada, Schering Corporation Limited, Montreal

a new liquid dosage form



Available in 6 fl. oz. bottles

Benzedrine Sulfate—formerly supplied in tablet form only—is now available also as:

BENZEDRINE SULFATE ELIXIR

Benzedrine Sulfate Elixir, N.N.R.—highly palatable, pleasant in appearance and easily tolerated—is identical in action with Benzedrine Sulfate Tablets. It is a preferred form of administration for invalids, convalescents, children and the aged. This new preparation contains Benzedrine Sulfate (racemic amphetamine sulfate, S.K.F.), 2.5 mg. per 5 cc. (1 teaspoonful); and has the same pharmaceutical properties as low-alcoholic, mildly acidic elixirs.

NOTE: When you next write for Benzedrine Sulfate, please remember to specify which of the two dosage forms you wish to prescribe—'Tablets' or 'Elixir'.

Smith, Kline & French Laboratories, *Philadelphia, Pa.*



for good behavior

In support of the patient with functional constipation, 'AGAROL'* Emulsion affords effective yet gentle relief by replacing underlying deficiencies of bulk, lubrication and peristaltic stimulation.

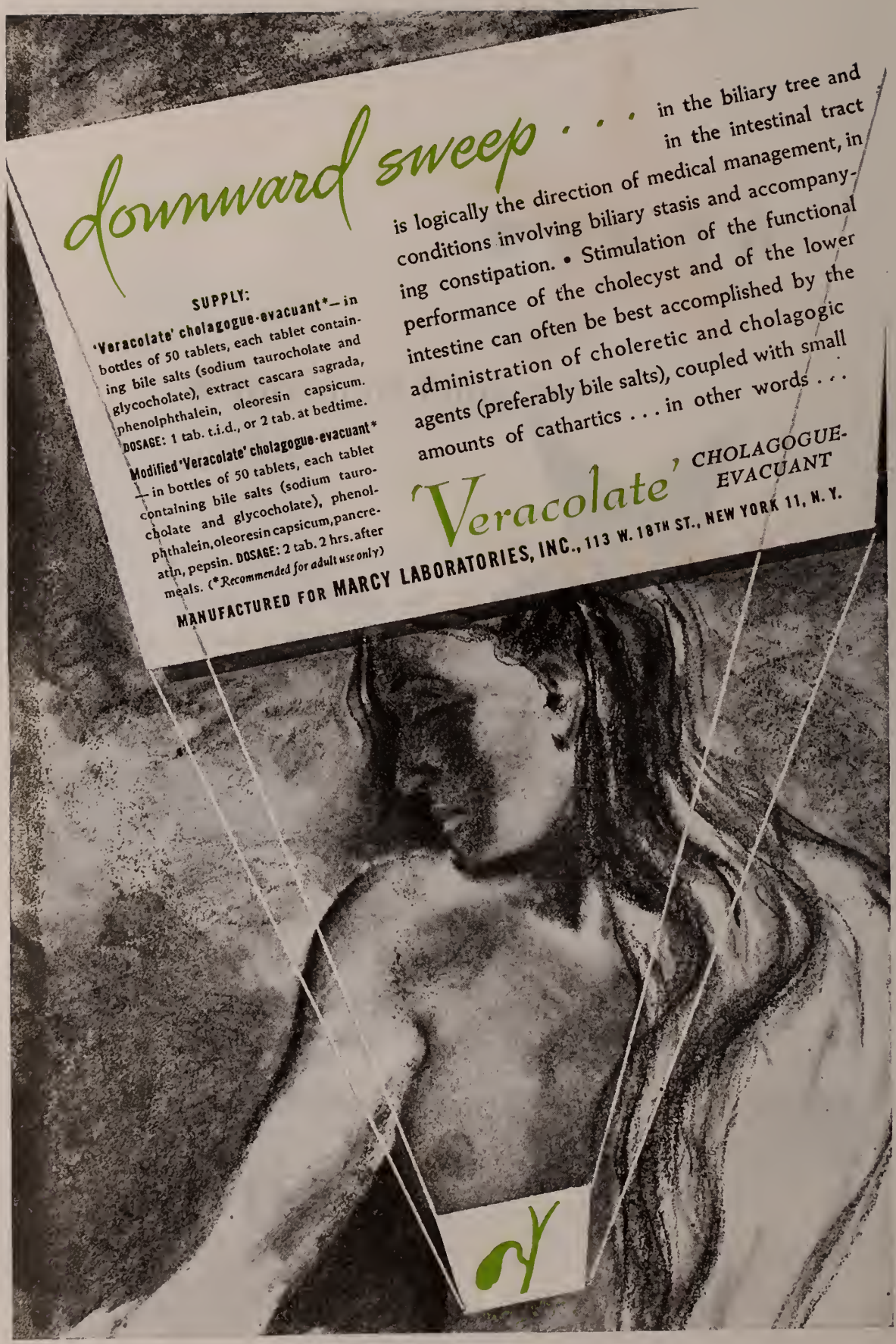
Never drastic, never harsh, 'AGAROL' Emulsion constitutes an ideal adjunct to other established measures of care, contributing notably to the ultimate attainment of good behavior in bowel function.

William R. WARNER and Co. Inc. 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'agarol'

Emulsion of mineral oil and an agar-gel with phenolphthalein. Supplied in bottles of 6, 10 and 16 fluidounces.

*Trademark Reg. U. S. Pat. Off.


downward sweep . . .
in the biliary tree and in the intestinal tract
is logically the direction of medical management, in conditions involving biliary stasis and accompanying constipation. • Stimulation of the functional performance of the cholecyst and of the lower intestine can often be best accomplished by the administration of choleretic and cholagogic agents (preferably bile salts), coupled with small amounts of cathartics . . . in other words . . .
SUPPLY:
'Veracolate' cholagogue-evacuant*—in bottles of 50 tablets, each tablet containing bile salts (sodium taurocholate and glycocholate), extract cascara sagrada, phenolphthalein, oleoresin capsicum.
DOSAGE: 1 tab. t.i.d., or 2 tab. at bedtime.
Modified 'Veracolate' cholagogue-evacuant*—in bottles of 50 tablets, each tablet containing bile salts (sodium taurocholate and glycocholate), phenolphthalein, oleoresin capsicum, pancreatin, pepsin. DOSAGE: 2 tab. 2 hrs. after meals. (*Recommended for adult use only)
'Veracolate' CHOLAGOGUE-EVACUANT
MANUFACTURED FOR MARCY LABORATORIES, INC., 113 W. 18TH ST., NEW YORK 11, N. Y.

IN THE CORRECTION OF HYPOCHROMIC ANEMIA

More than Iron Alone

MAY BE NEEDED

Hypochromic anemia, whether caused by inadequate food intake, increased nutritional requirement, or by blood loss, usually tends to perpetuate itself. Anemia engenders anorexia, hypochlorhydria and impaired digestion. This interferes with adequate intake, absorption and utilization of iron and other essential nutrients, thus intensifying the anemic state.

For the speedy correction of the anemia syndrome and its associated multiple nutritional deficiencies, iron alone is usually inadequate. *All* the lacking essential nutrients must be supplied, by both diet and appropriate medication.



★ **Heptuna**

a **ROERIG** *Preparation*

Heptuna presents a convenient and effective means of treating hypochromic anemia by supplying not only iron, but also other metabolic essentials frequently needed.

EACH CAPSULE CONTAINS:

★ **The Most Readily Available Form of Iron**

Ferrous Sulfate U.S.P. . . . . 4½ Grains

★ **Natural Fat-Soluble Vitamins**

Vitamin A (Fish-Liver Oil) . . . . . 5,000 U.S.P. Units
Vitamin D (Tuna-Liver Oil) . . . . . 500 U.S.P. Units

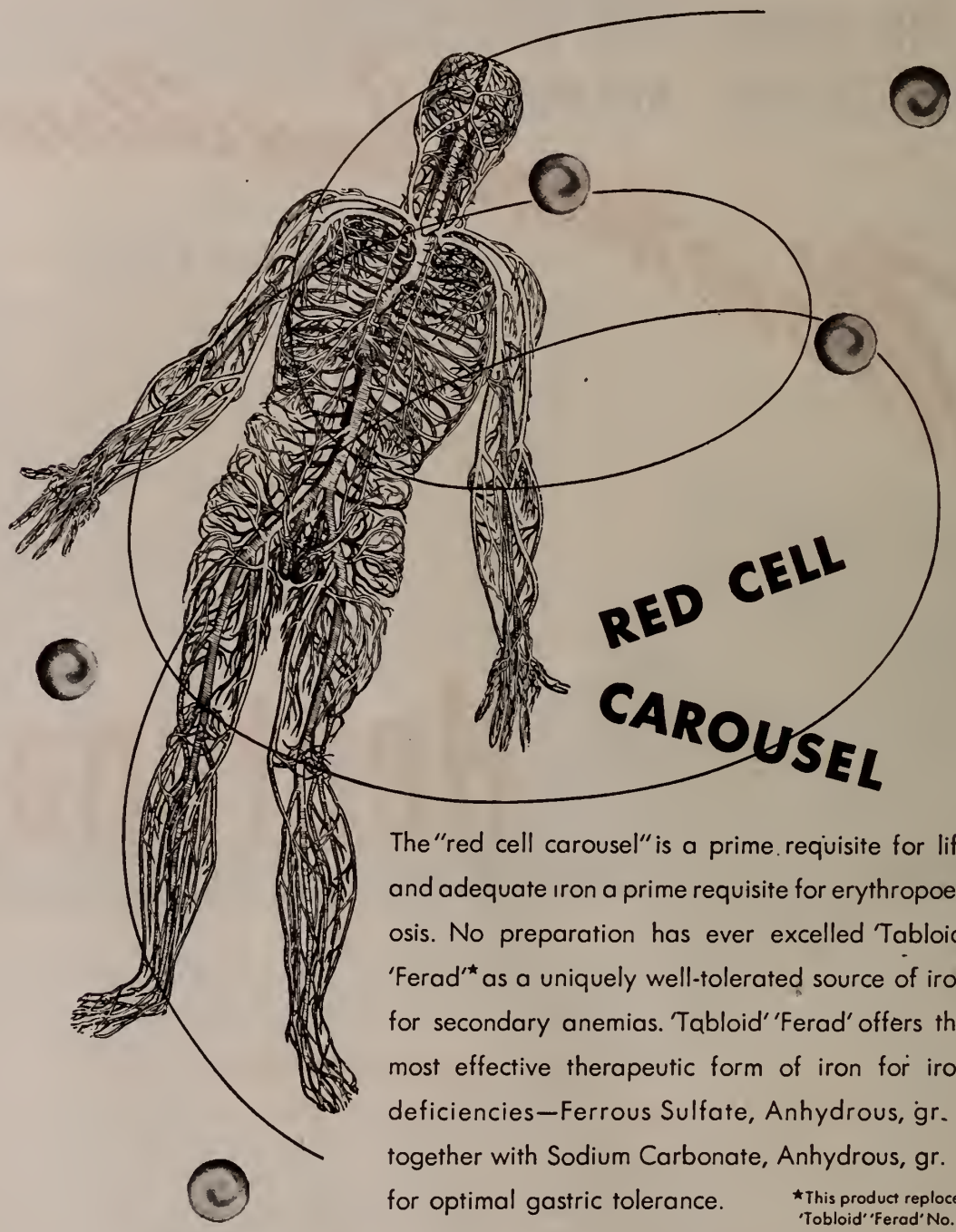
★ **B-Complex Vitamins**

Vitamin B_1 (Thiamine Hydrochloride) . . . . . 2 mg.
Vitamin B_2 (Riboflavin) . . . . . 2 mg.
Vitamin B_6 (Pyridoxine Hydrochloride) . . . . . 0.1 mg.
Calcium Pantothenate . . . . . 0.333 mg.
Niacinamide . . . . . 10 mg.

★ **Whole Natural B Complex**

Derived from Liver Concentrate (Vitamin Fraction) and Dried Yeast U.S.P.

J. B. ROERIG & COMPANY • 536 Lake Shore Drive • Chicago 11, Ill.



The "red cell carousel" is a prime requisite for life and adequate iron a prime requisite for erythropoeiosis. No preparation has ever excelled 'Tabloid' 'Ferad'* as a uniquely well-tolerated source of iron for secondary anemias. 'Tabloid' 'Ferad' offers the most effective therapeutic form of iron for iron deficiencies—Ferrous Sulfate, Anhydrous, gr. 3 together with Sodium Carbonate, Anhydrous, gr. 2 for optimal gastric tolerance.

*This product reploces 'Tobloid' 'Ferad' No. 2

'TABLOID' 'FERAD'

Bottles of 100 ond 500...'Tobloid' and 'Ferod' Reg. Trodemorks

BURROUGHS WELLCOME & CO. (U.S.A.) INC., 9 & 11 EAST 41ST ST., NEW YORK 17, N. Y.

the entire vitamin B complex

Presenting all clinically known factors in amounts (adult daily requirements) and ratio established by Food and Drug Administration.*

Plus all "unknowns" as provided by 155 mg. of a special mixture of 1:20 liver concentrate and high potency brewers' yeast extract.

At notably low cost-to-patient.

White's

MULTI-BETA CAPSULES

Ethically promoted—not advertised to the laity

WHITE LABORATORIES, INC., Pharmaceutical Manufacturers, Newark 7, N. J.

*Thiamine Hydrachloride 1 mg., Ribaflavin 2 mg., Nicotinamide 10 mg. per capsule. (10 mg. af nicatinic acid (amide) is recommended as adult minimum daily requirement by the Food and Nutritian Baard of National Research Cauncil thaugh not as yet formally adapted by FDA.)

Illinois State Medical Society

OFFICERS OF SECTIONS, 1945-1946

SECTION ON MEDICINE
L. E. Hines, Chmn., 104 S. Michigan Avenue, Chicago
W. H. Newcomb, Secy., Jacksonville

SECTION ON SURGERY
G. E. Johnson, Chmn., 1000 W. 59th Street, Chicago
J. B. Moore, Secy., Benton

SECTION ON EYE, EAR, NOSE & THROAT
Beulah Cushman, Chmn., 25 E. Washington Street, Chicago
H. L. Ford, Secy., Champaign

SECTION ON PUBLIC HEALTH & HYGIENE
E. A. Piszczek, Chmn., 737 S. Wolcott Avenue, Chicago
Richard F. Boyd, Secy., Springfield

SECTION ON RADIOLOGY
P. R. Dirkse, Chmn., St. Francis Hospital, Peoria
Frank L. Hussey, Secy., 250 E. Superior Street, Chicago

SECTION ON PEDIATRICS
John F. Carey, Chmn., Joliet
G. N. Krost, Secy., 2376 E. 71st Street, Chicago

SECTION ON OBSTETRICS & GYNECOLOGY
J. P. Greenhill, Chmn., 55 E. Washington Street, Chicago
E. N. Nash, Secy., Galesburg

SECTION ON PATHOLOGY
H. R. Fishback, Chmn., 303 E. Chicago Avenue, Chicago
M. C. Corrigan, Secy., 2839 Ellis Avenue, Chicago

COUNTY SOCIETIES

This list is corrected in accordance with the best information obtainable at the date of going to press. County Secretaries are requested to notify The Journal of any changes or errors.

County	President	Secretary
Adams	Aldo Germann, Quincy	Walter Stevenson, Quincy.
Alexander	J. K. Rosson, Cairo	J. S. Johnson, Cairo.
Bond	D. T. Brown, Mulberry Grove	Katherine B. Luzader, Greenville.
Boone	M. L. Hartman, Belvidere	S. J. Smith, Belvidere.
Bureau	F. E. Inks, Princeton	Gerald S. McShane, Spring Valley.
Calhoun	(See Pike-Calhoun)	R. E. Davies, Spring Valley.
Carroll	C. E. Turner, Savanna	W. J. Scholes, Lanark, Ill.
Cass	T. G. Charles, Beardstown	R. A. Spencer, Beardstown.
Champaign	C. S. Bucher, Champaign	J. D. McKinney, Champaign.
Christian	G. C. Bullington, Pana	W. S. Miller, Assumption.
Clark	C. O. Highsmith, Westfield	H. C. Houser, Westfield.
Clay	J. P. Shore, Sailor Springs	D. Curtis Henderson, Clay City.
Clinton	J. A. Bauer, Germantown	J. Q. Roane, Carlyle.
Coles-Cumberland	G. B. Dudley, Charleston	S. B. Nuzil, Mattoon.
Cook	J. J. Moore, Chicago	W. W. Furey, Chicago.
Crawford	B. C. Teasley, Jr., Robinson	L. P. Sloan, Oblong
De Kalb	Ralph G. McAllister, DeKalb	Paul W. Carney, DeKalb
De Witt	Chas. S. Bogardus, Clinton	Wm. R. Marshall, Clinton.
Douglas	E. J. Gross, Arcola	J. O. Cletcher, Tuscola.
Du Page	Allan S. Watson, Glen Ellyn	A. R. Richli, Naperville.
Edgar	H. D. Junkin, Paris	Paul E. Fleener, Paris.
Edwards	Andrew Krejar, West Salem	R. L. Moter, Albion.
Effingham	G. R. Marshall, Effingham	H. B. Runde, Teutopolis.
Fayette	A. M. Fromm, Ramsey	E. A. Kuehn, Vandalia.
Ford	A. L. Potts, Gibson City	Edward A. Tappan, Paxton.
Franklin	O. L. Rutherford, Christopher	R. E. Steck, Christopher
Fulton	W. H. Betts, Havana	P. D. Reinertson, Canton
Gallatin	E. W. Burroughs, Shawneetown	James A. Kirby, New Haven.
Greene	A. D. Wilson, Carrollton	W. H. Garrison, White Hall.
Hancock	I. W. Salowitz, Plymouth	Blair Kelly, Ferris.
Hardin	S. E. Oxford, Cave-in-Rock	
Henderson	M. J. Babcock, Biggsville	Elmer T. Swann, Oquawka.
Henry	Worling R. Young, Geneseo	P. J. McDermott, Kewanee.
Iroquois	A. W. Fordyce, Gilman	Ryland Buckner, Gilman
Jackson	Wm. F. Felts, Carbondale	Edward K. Ellis, Murphysboro.
Jasper	Wm. E. Franke, Newton	C. O. Absher, Newton.
Jefferson Hamilton	C. O. Hamilton, Mt. Vernon	T. B. Williamson, Mt. Vernon
Jersey	Hugh R. Bohannan, Jerseyville	Bert M. Brewster, Jerseyville.
Jo Daviess	G. C. McGinnis, Warren	R. E. Logan, Galena.
Johnson	Wm. Thompson, Cypress	E. A. Veach, Vienna.
Kane	Vernon L. Evans, Aurora	K. M. Manougian, Elgin.
Kankakee	Robert Bedard, Kankakee	A. L. Nickerson, Kankakee.
Kendall	No Society	
Knox	Wm. Johnson, Galesburg	G. K. Smart, Galesburg.
Lake	Morley D. McNeal, Highland Park	R. M. Watrous, Highland Park.
La Salle	John L. Rock, Oglesby	F. J. Maciejewski, La Salle.
Lawrence	R. B. Armitage, Lawrenceville	L. W. Frame, Lawrenceville.
Lee	S. P. Stackhouse, Dixon	J. M. Lund, Dixon.
Livingston	O. L. Bettag, Pontiac	E. G. Beatty, Pontiac.
Logan	Chester Davis, Lincoln	R. Lynn Ijams, Atlanta.
McDonough	W. E. Carnahan, Macomb	W. M. Hartman, Macomb.

*Deceased.

(Continued on page 56)



For the Uphill Haul

The correction of chronic constipation is an "uphill haul" which succeeds only when patients *willingly* stay with the prescribed regime. They are more likely to stay with Mucilose—a highly purified, concentrated source of intestinal bulk. Doses are accordingly smaller*, easier to take, more economical...and more measurably effective.

*Tests of leading psyllium-type preparations show that Mucilose produces five times more bulk per gram than the average of the others. (Gray, H., and Tainter, M. L.: Am. J. Digest. Dis. 8:130, 1941.)

Mucilose

Highly Purified Hemicellulose

FOR INTESTINAL BULK

MUCILOSE is a highly purified hemicellulose of Plantago loeflingii. Hydrophylic... it absorbs approximately 50 times its weight of water to form a bland lubricating bulk which gently stimulates peristalsis. Hypoallergenic—free from irritants—nondigestible—nonabsorbable.

INDICATED in the treatment of both spastic and atonic constipation, and as an adjunct to dietary measures for the control of constipation in aged, convalescent and pregnant patients... those with hemorrhoids, and with erratic dietary habits.



DOSAGE: One or two teaspoonfuls once or twice daily, along with ample liquids to assure maximum bulk formation. *Unflavored*—Mucilose mixes well with any fluid ...sweet or salty...to suit any taste. Placed on the tongue and washed down with water, or eaten along with other foods, Mucilose—because it contains no diluents—has no flavor to be disguised.

SUPPLIED in 4 oz. bottles and 16 oz. containers. Also available as Mucilose Granules—a dosage form which is preferred by some patients.

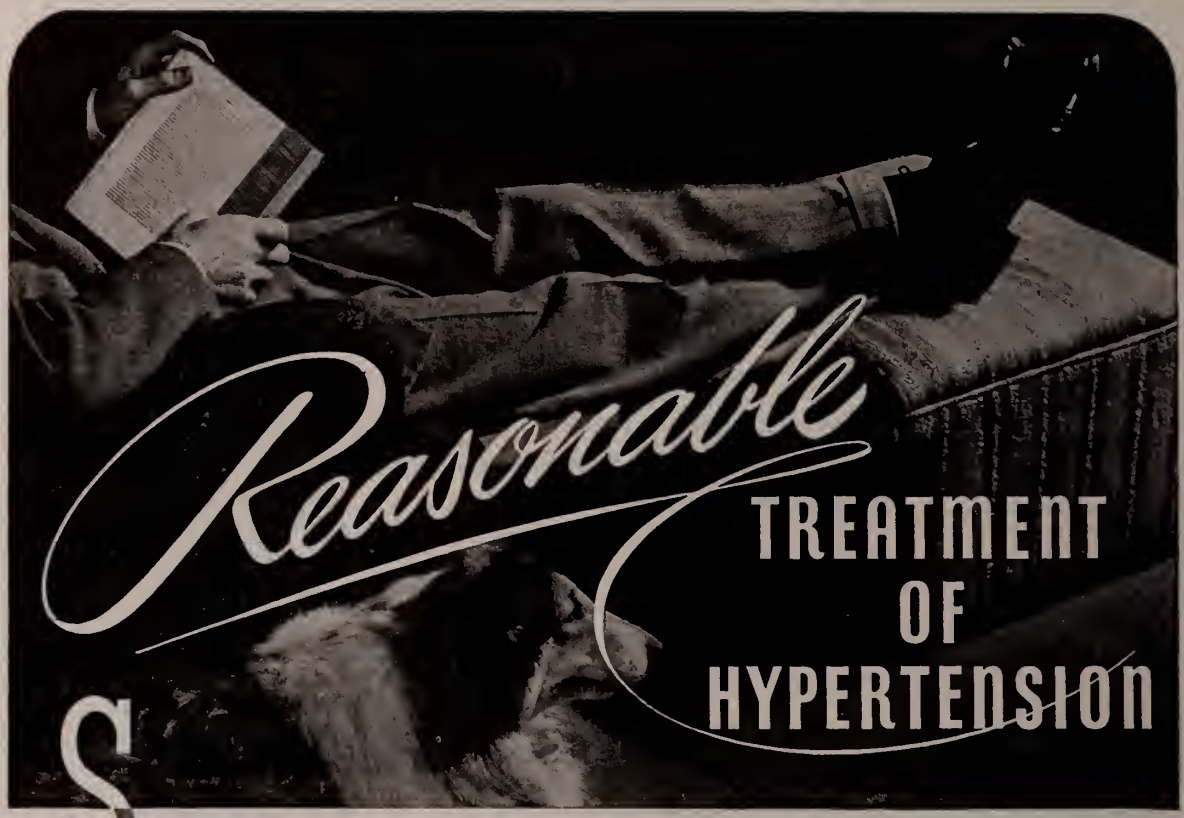
Frederick Stearns & Company

Division

DETROIT 31, MICHIGAN

NEW YORK KANSAS CITY SAN FRANCISCO WINDSOR, ONTARIO SYDNEY, AUSTRALIA AUCKLAND, NEW ZEALAND

Trade-Mark Mucilose Reg. U. S. Pat. Off.



Reasonable TREATMENT OF HYPERTENSION

Successful management of high blood pressure calls for a regimen which is adjusted to individual requirements. Physical activity is generally curtailed and overwork is avoided. In certain circumstances special diets are prescribed and the use of stimulants is restricted.

These measures are often supplemented with the administration of Theominal. This combined vasodilator and sedative aids in reducing blood pressure to a more normal level. As a consequence hypertensive symptoms are relieved and the risk of complications is reduced.

DOSAGE: The customary dose of Theominal is 1 tablet two or three times daily; when improvement sets in the dose may be reduced. Each tablet contains theobromine 5 grains and Luminal* ½ grain.

*Luminal (trademark), Winthrop Chemical Company, Inc., brand of phenobarbital.

WINTHROP **Theominal**

Reg. U. S. Pat. Off. & Canada

Supplied in bottles of 25, 100 and 500 tablets.

Winthrop CHEMICAL COMPANY INC.

Pharmaceuticals of merit for the physician

NEW YORK, N. Y.
WINDSOR, ONT.



HISTAMINE THERAPY The therapeutic efficacy of histamine in rheumatoid, arthritic and neuralgic affections has been repeatedly confirmed by clinical studies. Imadyl Unction 'Roche' combines the potent vasodilating effect of histamine with the dependable analgesic action of salicylates. Its application — by simple massage — stimulates sluggish local circulation, brings a pleasant sensation of warmth to the affected area, and markedly relieves pain and discomfort. This singular effectiveness of Imadyl Unction makes it a particularly valuable remedy for the relief of rheumatoid, arthritic and neuralgic aches and pains. Supplied in 1½-oz. tubes and 1-lb jars.

HOFFMANN-LA ROCHE, INC. • ROCHE PARK • NUTLEY 10, NEW JERSEY

FOR RELIEF OF RHEUMATOID PAIN **IMADYL UNCTION 'ROCHE'**

Announcing...

TWO NEW PENICILLIN PRODUCTS

of Schenley Laboratories, Inc.

PENICILLIN TROCHES SCHENLEY—

With a base which dissolves slowly, and thus gradually liberates penicillin at the site of infection, these troches provide an effective means for treatment of mouth and throat infections due to Vincent's organisms. Penicillin Troches Schenley retain potency over long periods when kept at recommended temperature.



Penicillin Troches Schenley—1,000 units each. Supplied in bottles of 25.

PENICILLIN TABLETS SCHENLEY—

Buffered with calcium carbonate, these superior tablets are indicated in treatment of gonorrhea and in continuing therapy of pneumococcic, streptococcic, and staphylococcic infections after acute phase of infection has been controlled. Stability of tablets permits ambulatory patients to carry with them the required daily dose.



Penicillin Tablets Schenley — 25,000 units each. Supplied in bottles of 20.

SCHENLEY LABORATORIES, Inc.

Executive Offices:
350 FIFTH AVENUE, NEW YORK CITY
Producers of PENICILLIN SCHENLEY

Your Local Distributor for **PENICILLIN** SCHENLEY *is:*

CHICAGO
Chemists Supply Company
Debs Hospital Supplies
Illinois Surgical Supply Co.
Sheridan Physicians Supply Co.
Thompson Medical Supply

EVANSTON
D. S. Lyman, Pharmacist
MOLINE
Otto Schweinberger & Company
PEORIA
Sutliff & Case Co., Inc.

PURODIGIN now costs no more than preparations of whole digitalis leaf.

Facts ON PURODIGIN

REG. U. S. PAT. OFF.

PURODIGIN contains the highly purified glycoside, digitoxin ($C_{41}H_{64}O_{13}$)—"first in the choice of digitalis materials for general therapeutic use."—Gold et al., J. Pharmacol. 82:187, 1944.

PURODIGIN is approximately 1000 times as potent in man as digitalis leaf.

PURODIGIN is safe. The ratio of therapeutic dose to toxic dose is the same as in the case of digitalis.

PURODIGIN is rapidly and completely absorbed following oral administration.

PURODIGIN is well tolcrated. Small dosage and complete absorption minimize gastrointestinal irritation.

PURODIGIN dosage is based on weight, eliminating the confusion of biologic units.

Digitalization can be accomplished with 1.2-1.5 mg., in single or divided doscs.

Digitalization can be maintained in most patients with a dose of 0.2 mg. pcr day.

PURODIGIN is the first American-made digitoxin.

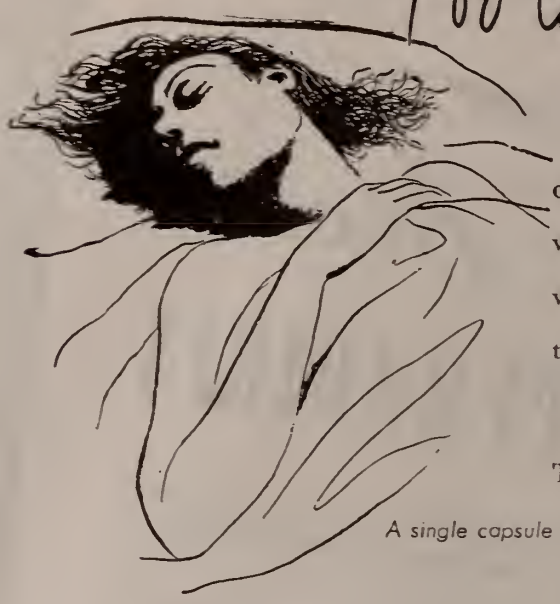


0.2 mg. tablets, vials of 30 and bottles of 100.

0.1 mg. tablets, bottles of 100.

Wyeth
REG. U. S. PAT. OFF.

WYETH INCORPORATED • PHILADELPHIA 3 • PA.



For the new Concept

of supplying sick patients, who have mixed vitamin deficiencies, with all the essential vitamins in doses of therapeutic magnitude, specify . . .

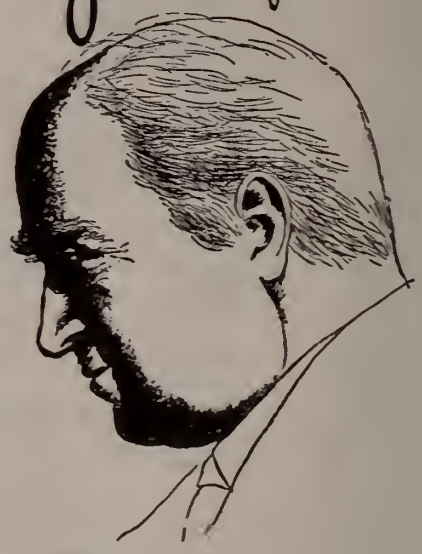
SQUIBB

THERAPEUTIC FORMULA

A single capsule contains:

Vitamin A	25,000 units
Vitamin D	1,000 units
Thiamine HCl	5 mg.
Riboflavin	5 mg.
Niacinamide	150 mg.
Ascorbic Acid	150 mg.

For the continuing Concept



of supplying well patients with maintenance dosage levels of all the vitamins as recommended by the Food and Nutrition Board of the National Research Council, specify . . .

SQUIBB

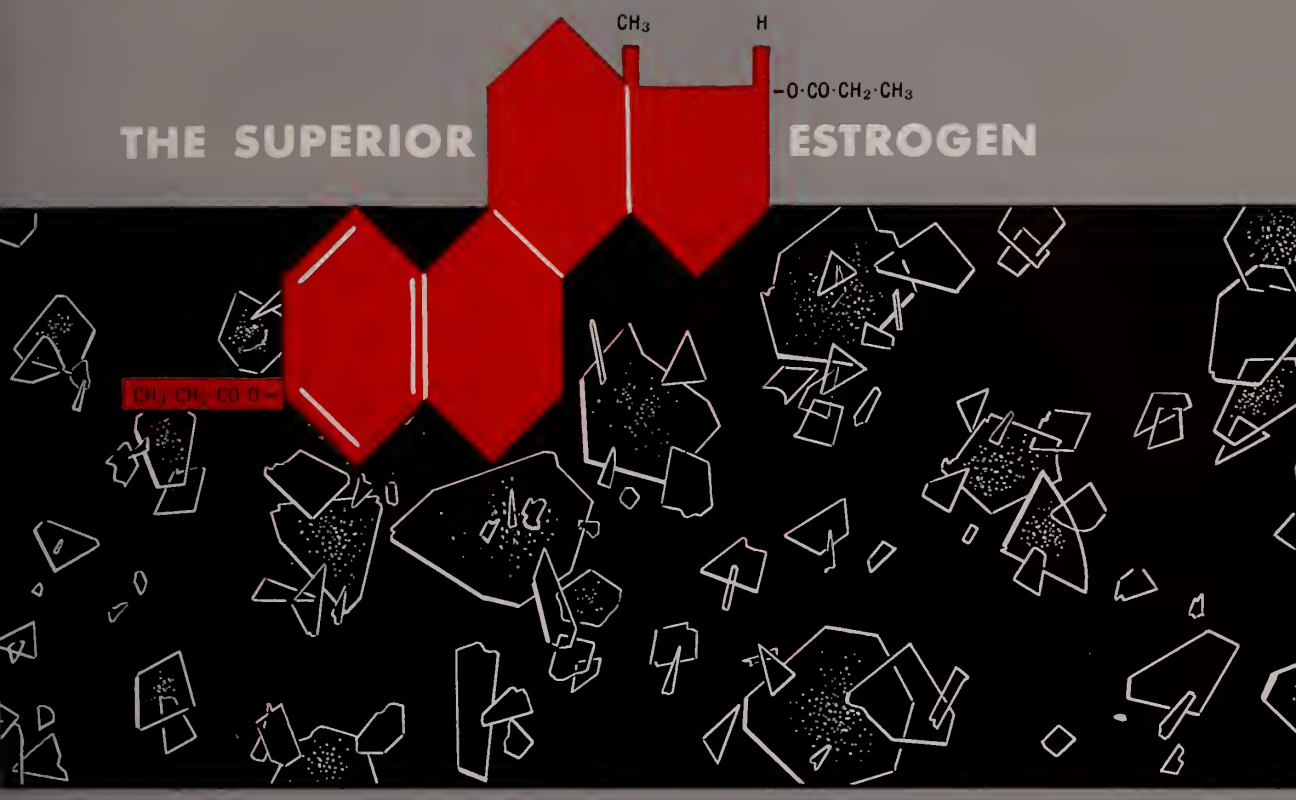
SPECIAL FORMULA

A single capsule contains.

Vitamin A	5,000 units
Vitamin D	800 units
Thiamine HCl	2 mg.
Riboflavin	3 mg.
Niacinamide	20 mg.
Ascorbic Acid	75 mg.

SQUIBB . . . MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858

THE SUPERIOR ESTROGEN



Ciba research is proud of its accomplishments in the field of steroid sex hormones. The development of endocrinology from the early days when de Graaf gave the first authentic account of the ovarian follicle, to the present-day understanding of the vital role played by the gonadal hormones, is an evolution in which Ciba has latterly had an important part. The record of Ruzicka and his associates, who first synthesized the androgenic hormone in cooperation with Ciba laboratories, is one of the cornerstones of our tradition.

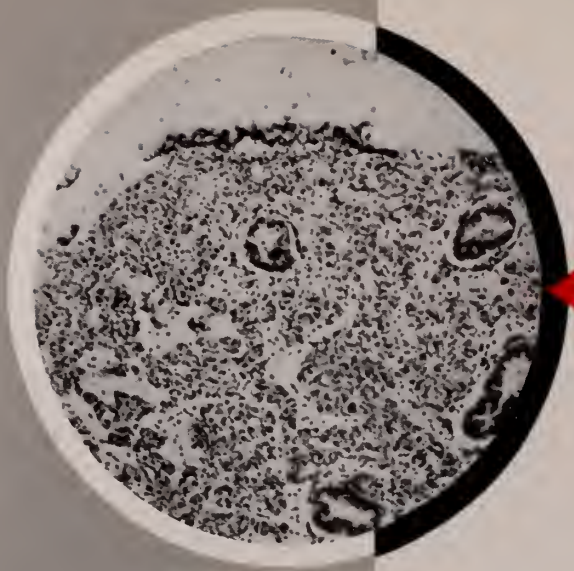
DI-OVOCYLIN

(α-estradiol dipropionate)

Trade Mark Reg. U. S. Pat. Off. and Canada

With the development of Di-Ovocylin, Ciba offers the superior estrogen having long-sought advantages of prolonged duration of effect with greatest economy.

CIBA



INFANTILISM:
ENDOMETRIAL
BIOPSY

AMENORRHEA

"While nat establishing spantaneaus menstrual periads," large dases af estragenic substances "nevertheless resulted in the appearance af many episades af uterine bleeding, breast develapment, develapment of pubic and axillary hair and physialagical and sacial adjustments."

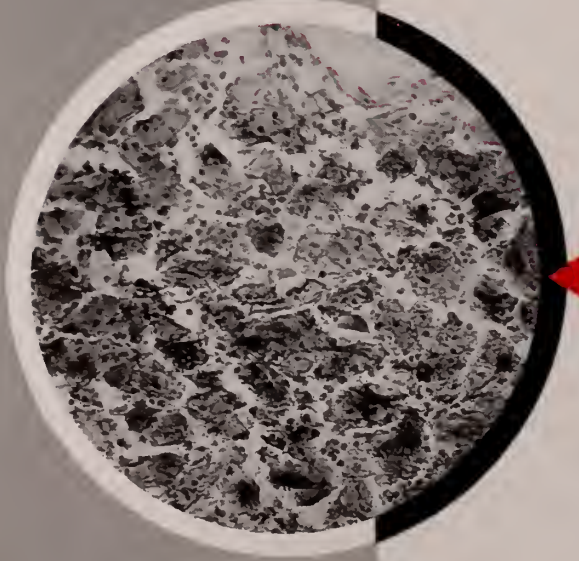
Finkler & Bass: Med. Woman's J., 47: 1, 1940.



DYSMENORRHEA

"The cramps af essential dysmenarrhea can be successfully eliminated with estrogen when an adequate dase is started early enaugh in the cycle. The advantages af using 'estradial diprapianate' are that a minimum af injectians are required and there are no demanstrable taxic effects."

Sturgis & Meigs: Surg., Gyn., & Obst., 75: 87, 1942.



MENOPAUSE:
VAGINAL SMEAR

MENOPAUSE

It is suggested that menapausal patients "shauld receive injectians af 5 mg. af estradial diprapianate" . . . "ance weekly far three weeks. If this daes nat praduce a satisfactary therapeutic respanse there is na need ta cantinue searching far the praper dasage af estragens, since this dase is ample far all such cases."

Queries and Minor Notes, J. Am. Med. Assoc., 129: 1295, Dec. 29, 1945.

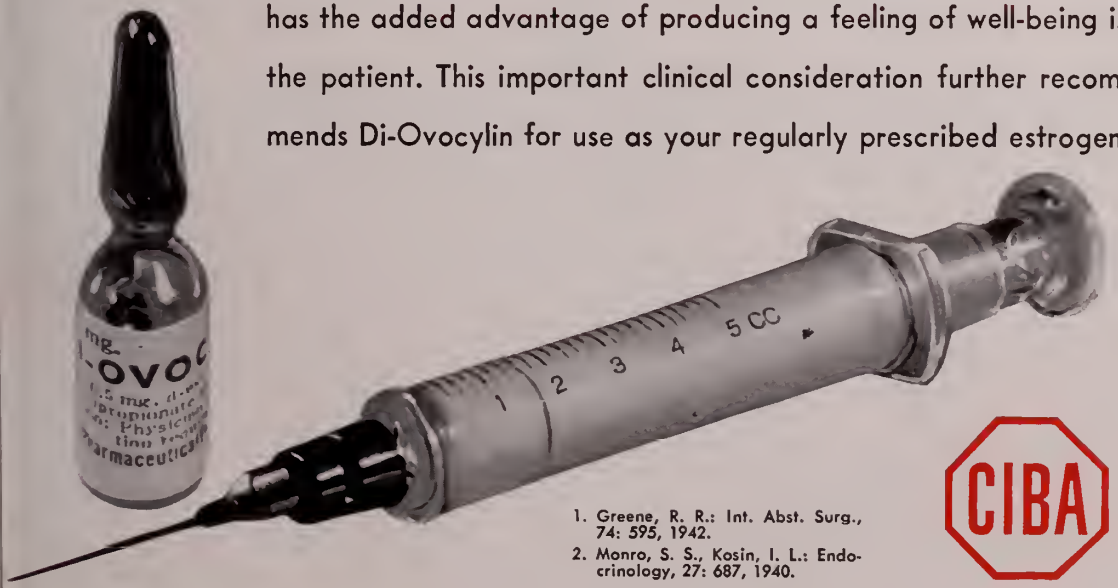
DI-OVOCYLIN

GIVES INCREASED INTENSITY AND PROLONGED DURATION OF EFFECT

Early estrogen therapy was hampered by the short-lived effect of the injection. Increasing doses merely resulted in wastage. Small divided amounts meant inconvenient multiple injections. With the advent of the esterified estrogenic hormone, Di-Ovocylin (estradiol dipropionate), the organism is spared the periodic alternation of hormonal want or abundance, and is supplied a constant, sufficient amount of estrogen. Whereas estrone injections may be required two or three times weekly, a single injection of Di-Ovocylin every fourteen to twenty-one days will control symptoms in the majority of menopausal patients.[1] In potency as well as in duration of effect, Di-Ovocylin offers greatest advantage. In one comparison of the potency of several estrogens, using the oviduct-stimulating power in chicks as criterion, it was shown that estrone had the lowest potency, estradiol and estradiol benzoate were higher, and estradiol dipropionate had highest potency.[2] Make Di-Ovocylin your estrogen of choice for its lasting therapy, easier management of cases, and gratifying economy.

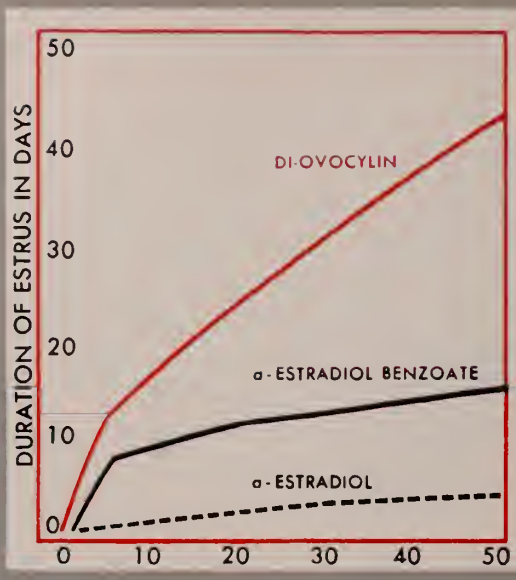
PRODUCES FEELING OF WELL-BEING

Di-Ovocylin, being a derivative of a natural estrogenic hormone, has the added advantage of producing a feeling of well-being in the patient. This important clinical consideration further recommends Di-Ovocylin for use as your regularly prescribed estrogen.

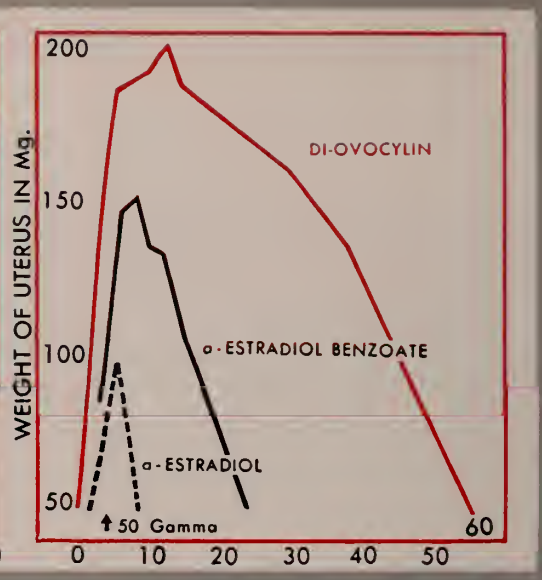


1. Greene, R. R.: Int. Abst. Surg., 74: 595, 1942.
2. Monro, S. S., Kosin, I. L.: Endocrinology, 27: 687, 1940.

CIBA



Duration of estrus produced in castrated rats by estradiol, estradiol benzoate, and estradiol dipropionate.



Effect of estradiol, estradiol benzoate, and estradiol dipropionate on the uterine weight of castrated rats.

CIBA ESTROGENS



DI-OVOCYLIN
(α-estradiol dipropionate)

Supplied: Ampuls of 1 cc. containing 0.1 or 0.2 mg., in cartons of 6 and 50; ampuls of 1 cc. containing 0.5, 1.0, 2.5, or 5.0 mg., in cartons of 3, 6, and 50.



OVOCYLIN (α-estradiol) TABLETS

As Ovocylin, like all steroid hormones, loses some potency when administered orally, it is usually employed as adjuvant to injections. Supplied: Tablets of 0.1, 0.2 or 0.5 mg., in bottles of 30, 100, and 250.



OVOCYLIN SUPPOSITORIES

Used in conditions such as vulvovaginitis of infants, senile vaginitis, pruritus vulvae. Supplied: Suppositories of 0.04 mg., boxes of 10 (Adult's size) and 30 (Children's size); 0.4 mg., boxes of 10 (Adult's size).



OVOCYLIN OINTMENT

For concentrated local effect in conditions such as under-developed breasts or senile vaginitis. Supplied: Concentrations of 0.03 mg. and 0.15 mg. per Gram, in tubes of 50 Grams.

Ovocylin and Di-Ovocylin—Trade Marks Reg. U. S. Pat. Off. and Canada



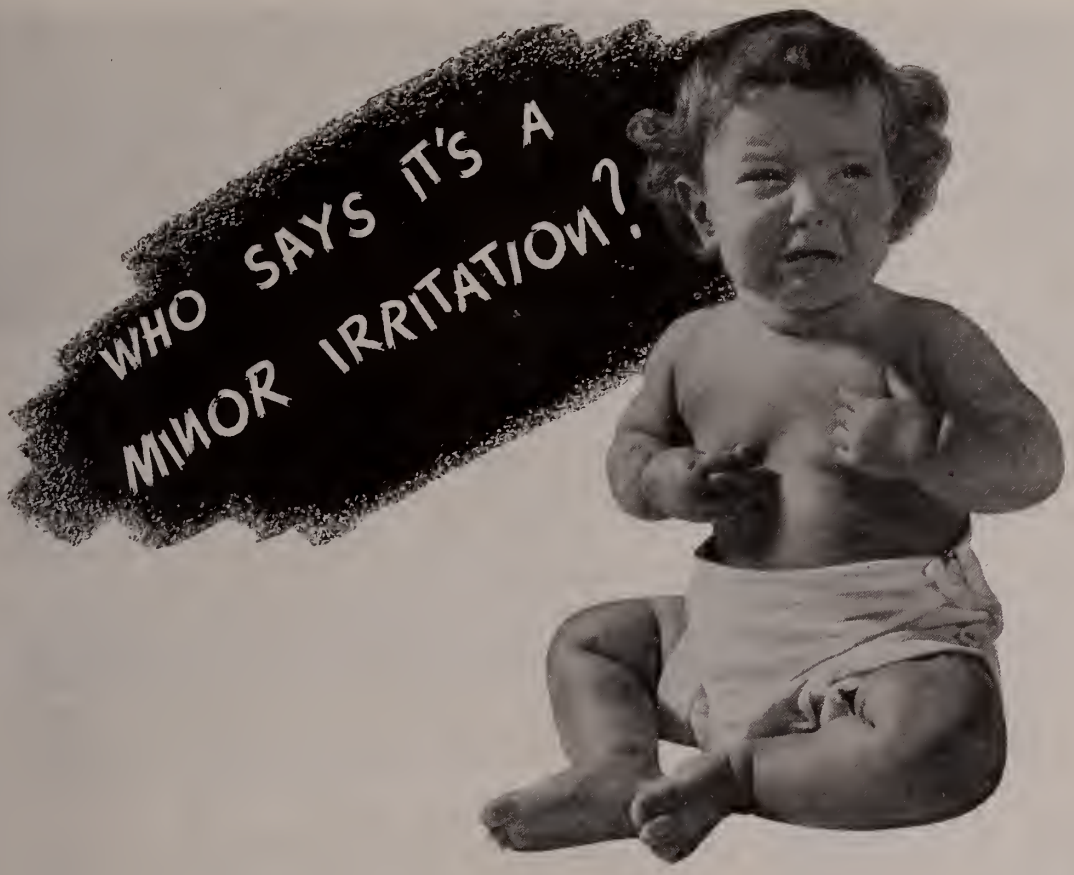
Steroid Hormones . . . Fine Pharmaceuticals

CIBA PHARMACEUTICAL PRODUCTS, INC.

SUMMIT · NEW JERSEY

IN CANADA: CIBA COMPANY LIMITED, MONTREAL

1/46—1025 M.



You wouldn't think so if you itched from diaper rash, eczema, chafing, chickenpox or scarlet fever. It would seem mighty important to you . . . and so would the soothing comforting relief of ENZO-CAL.

Rubbed gently on irritated areas, the benzocaine in ENZO-CAL promptly allays the burning, stinging pain and, at the same time, a protective, healing layer of semi-colloidal calamine and zinc oxide is left on the skin.

Mothers, too, appreciate ENZO-CAL because it is clean, convenient to use, and *greaseless.*

Prescribe ENZO-CAL in your next case of pruritus . . . or, better yet, suggest that your patients keep a tube on hand for routine use in the various skin irritations of infanthood.

May we send you a FREE trial tube of ENZO-CAL? Address your request to us at 305 East 45 St., New York 17, N. Y.

CROOKES *Laboratories*

Enzo-CAL for ITCHING



STAYING POWER!

Unlike the conventional airplane whose flashing speed restricts its usefulness in air-sea rescue work, the Helicopter can hover over a doomed ship like a ministering angel. It is unique because it has *staying power!*

Staying Power is frequently a desirable quality in local anesthetics, too. Nearly all local anesthetic agents are fleeting in their action. But Eucupin (isoamylhydrocupreine) is different... it has *staying power.* Because it has a slower absorption rate, and because it has a selective affinity for nerve tissue, Eucupin maintains prolonged analgesia... hours longer than rapid-acting anesthetics.

Eucupin is supplied in various forms for both infiltration anesthesia and topical application. Among these, two stand out for use in general practice—

EUCUPIN *Ointment*

for prolonged relief of pain and discomfort in skin and ano-rectal conditions (1 oz. tubes and 1 lb. jars)

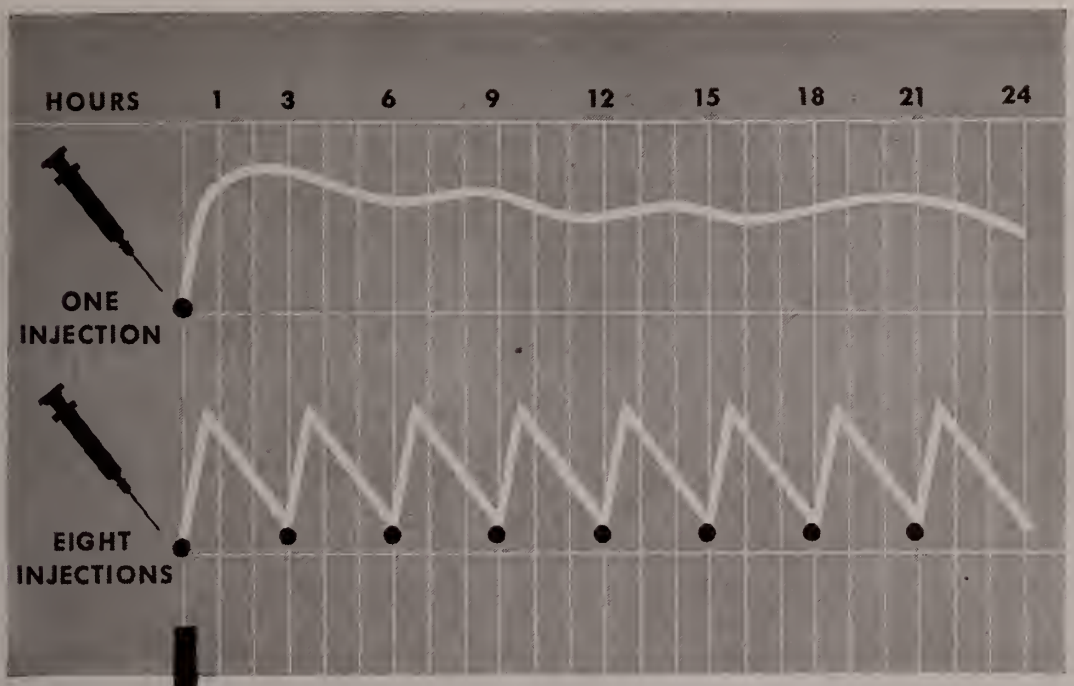
EUCUPIN *Suppositories*

for long-lasting analgesia in hemorrhoids and other ano-rectal disorders (Boxes of 12)

Literature and sample on request

RARE CHEMICALS, INC., Harrison, N. J.
West Coast Distributors: GALEN COMPANY, Berkeley 2, Calif.
"Eucupin" Reg. U. S. Pat. Off.

91J



MAINTAIN HIGH PENICILLIN TIDE IN THE BLOOD STREAM BY ONE INJECTION IN 24 HOURS WITH TRUE ROMANSKY FORMULA . . . OFFERED BY BRISTOL LABORATORIES

Office or home treatment now becomes practicable through administration of Penicillin in Oil and Wax as developed by Captain M. J. Romansky (M.C.) at the Walter Reed General Hospital, Washington, D. C. With this preparation it is possible to hold a penicillin therapeutic blood level by one injection in 24 hours, thus replacing the previous use of 8 injections of penicillin in saline over 24 hours.

There is usually less discomfort to the patient, and hence better cooperation. Also, by eliminating repeated injections the cost of treatment to the patient is lowered, and there is an appreciable saving in physicians' and nurses' time. Only with the true Romansky formula, based on a single injection of 1 cc. of 300,000 units in the oil-beeswax medium, is this possible.

Bristol Laboratories now offer the true Romansky formula with calcium penicillin. Due to special processing, the Bristol preparation is especially easy to inject. Write for new literature.

BRISTOL
LABORATORIES
INCORPORATED

Formerly Cheplin Laboratories Inc.

SYRACUSE 1, NEW YORK



The combined use of an occlusive diaphragm and vaginal jelly remains, in the published opinions of competent clinicians, the most dependable method of conception control.

Dickinson[1] has long held that the use of jellies alone cannot be relied upon for complete protection. It is noteworthy that in the series of patients studied by Eastman and Scott[2], an occlusive diaphragm was employed in conjunction with a spermicidal jelly for effective results. Warner[3], in a carefully controlled study of 500 patients, emphasized the value of a diaphragm.

In view of the preponderant clinical evidence in its favor, we suggest that physicians will afford their patients a high degree of protection by prescribing the diaphragm and jelly technique.

You assure quality when you specify a product bearing the "RAMSES"* trademark.

1. Dickinson, R. L.: Techniques of Conception Control. Baltimore, Williams and Wilkins Co., 1942.
2. Eastman, N. J., and Scott, A. B.: Human Fertility 9:33 (June) 1944.
3. Warner, M. P.: J. A. M. A. 115:279 (July 27) 1940.

gynecological division

JULIUS SCHMID, INC.

Quality First Since 1883

423 West 55 Street New York 19, N. Y.

*The word "RAMSES" is a registered trademark of Julius Schmid, Inc.



Pain in peptic ulcer results from increased gastric tension and irritable bowel and not from hyper-acidity[1]. In fact, the peptic ulcer patient in many cases does not secrete more acid or gastric juice than normal human beings[2]. The damage is done by retention of acid or gastric juice because of improper emptying time of the stomach. Whatever the etiology, however, acid irritates the lesion.

Treatment, then, should be directed toward non-systemic neutralization but more important the relief of the symptoms of irritable bowel and pylorospasm. BICALCE affords a rational management, combining in powder form Aluminum Hydroxide, Bismuth and Calcium salts with VEGETABLE MUCILAGE (Gel). Excellent and gratifying results have been reported with vegetable mucilage in controlling irritable bowel and the associated distress of peptic ulcer.



BICALCE is now available in individual dose envelopes, permitting accurate dosage and ease in administration. Packaged in prescription cartons of 21 envelopes each. Literature on request.

Bicalce

1. Paul & Rhomberg, J. Iowa S. M. A., *35*:167, 1945
2. Sandweiss, et al, J. A. M. A., *130*:261, 1946

IRWIN, NEISLER & CO. 60th ANNIVERSARY Irwin Neisler **DECATUR, ILLINOIS**



"It's a Boy!"

—and his life expectancy is brighter, and longer by 15 years —thanks to medicine's "men in white"

● Cold figures . . . with a warm, wonderful significance. Yes, the figures on increased life expectancy tell as much as a five-foot shelf of volumes on the amazing strides modern medical science has made in protecting and prolonging human life.



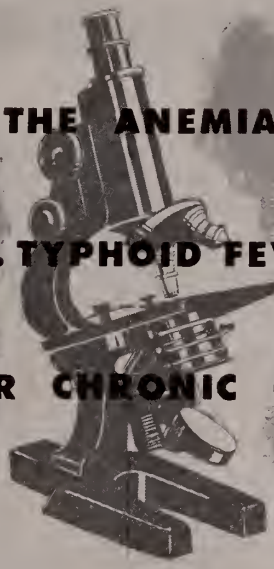
R. J. Reynolds Tobacco Co., Winston-Salem, N. C.

According to a recent independent nationwide survey:

MORE DOCTORS SMOKE CAMELS

than any other cigarette

Number 4 of a Series



IN THE ANEMIA OF

TUBERCULOSIS . . . TYPHOID FEVER . . . NEPHRITIS

AND OTHER CHRONIC CONDITIONS

HEPATINIC

Two factors function in chronic infections to produce the usually concomitant hypochromic anemia—

(a) increased destruction or increased utilization of red cells due to the infection;

(b) impaired intake or utilization of diet.

Consequently one phase of medical management of chronic infections includes eradication of the coexisting anemia. Hepatinic presents iron in preferred form, together with crude (unfractionated) liver concentrate, enhanced by the addition of the B complex. The crude (unfractionated) liver concentrate is subjected in manufacture to a special process of "enzymatic digestion," assuring maximum assimilation and therapeutic efficacy.

Taste Appeal!

Taste is important in hemopoietic tonics. Hepatinic—pleasantly palatable—is readily accepted even by finicky, taste-conscious patients. Samples will be sent to physicians on request.

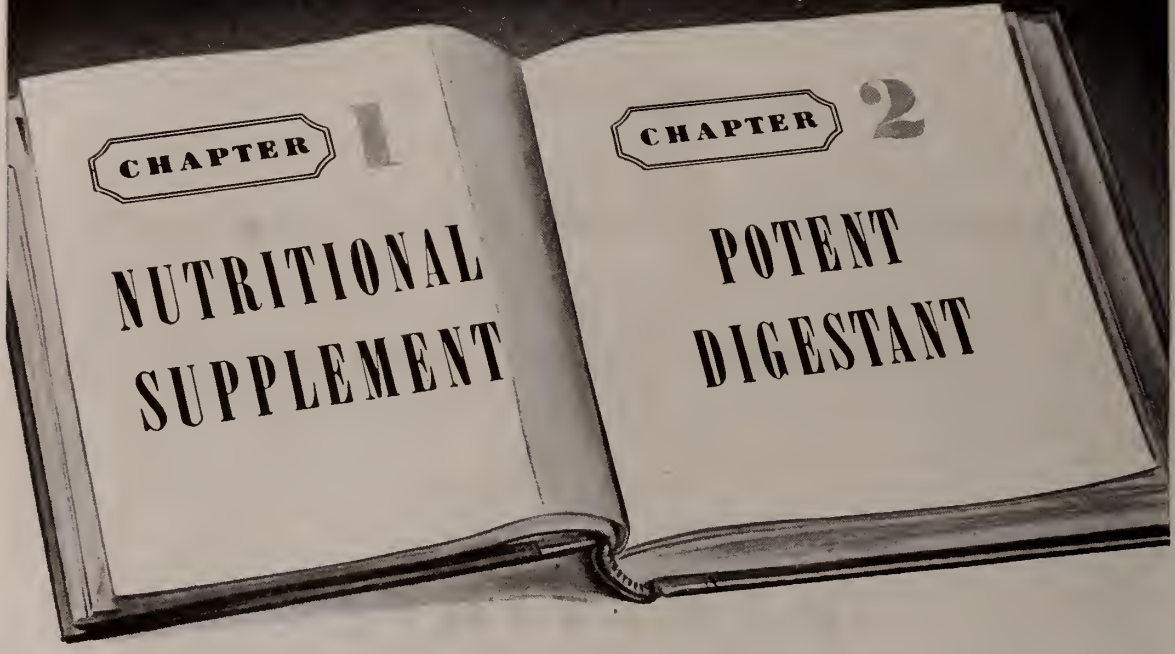
FORMULA:

Each fluidounce contains: Ferrous Sulfate 12 gr., Crude Liver Concentrate (equivalent to 660 gr. fresh liver) 60 gr., fortified to represent Thiamine Hydrochloride 2 mg., Riboflavin 4 mg., Niacinamide 20 mg., together with pyridoxine, pantothenic acid, choline, folic acid, vitamin B_{10}, vitamin B_{11}, biotin, inositol, para-amino-benzoic acid and other factors of the vitamin B complex.

Elixir Hepatinic is supplied in bottles of one pint and one gallon

McNeil Laboratories
INCORPORATED
PHILADELPHIA • PENNSYLVANIA

The TAKA-COMBEX Story in TWO Chapters



For management of patients with impaired carbohydrate digestion and faulty assimilation of water-soluble vitamins B and C, Taka-Combex Kapseals become the most logical dietary supplement.

The Taka-Combex story involving these patients can be told in two chapters:

1 The vitamin combination contains B_1, B_2, B_6, pantothenic acid, nicotinamide, and other components of the B-complex derived from liver, plus Vitamin C.

2 Taka-Diastase, potent enzyme with ability to liquefy 450 times its own weight in starch in ten minutes is present in the amount of two and one-half grains in each Kapseal.

Parke, Davis & Company

DETROIT 32 • MICHIGAN



TAKA-COMBEX KAPSEALS

One or two Kapseals three times daily is the usual dosage.

A Non-Systemic Antacid and Protective



IN peptic ulcer, Kamadrox affords rapid relief of epigastric discomfort and prompt objective improvement. It promotes healing of the ulcer crater because of the specific influence of its three ingredients (*Magnesium Trisilicate,* 50%; *Aluminum Hydroxide,* 25%; *Colloidal Kaolin,* 25%).

Kamadrox exerts prompt, profound, and sustained acid-combining power. Yet it is systemically inert so that it cannot lead to alkalosis or to a secondary rise in acidity. By forming a coating over the ulcer crater, it provides mechanical as well as chemical protection. Kamadrox is astringent, demulcent, and adsorbent. Its ease of administration and pleasant taste are appreciated by the patient and assure his cooperation in carrying out the ulcer regimen.



KAMADROX

KAMADROX POWDER is supplied in 4-oz. and 1-lb. jars.

KAMADROX TABLETS are supplied in bottles of 100, 500, 1,000 and 5,000. Each tablet contains: *Magnesium Trisilicate,* 4 gr.; *Aluminum Hydroxide,* 2 gr.; *Colloidal Kaolin,* 2 gr.

KAMADROX LIQUID. Each fluidounce represents 64 gr. (4.15 Gm.) magnesium trisilicate and 32 gr. (2.1 Gm.) kaolin colloidal, suspended in 3½% aluminum hydroxide gel, aromatics, q.s.

THE S. E. MASSENGILL COMPANY

Bristol, Tenn.-Va.

NEW YORK • SAN FRANCISCO • KANSAS CITY

SEMCO



Old enough to be his grand-folks -- yet the physician's kindly understanding of their geriatric problems inspires their fullest confidence.

Essential to the physician's confident manner is his reliance on medicines of unvarying quality. His confidence is well-placed when his prescriptions specify "Warren-Teed."

WARREN-TEED

Medicaments of Exacting Quality Since 1920

THE WARREN-TEED PRODUCTS COMPANY, COLUMBUS 8, OHIO

Warren-Teed Ethical Pharmaceuticals: capsules, elixirs, ointments, sterilized solutions, syrups, tablets. Write for literature.

Table of Contents

APRIL, 1946
VOL. 89, NO. 4

ORIGINAL ARTICLES

Herniation of the Intervertebral Disc. A systematized Technique for the Investigation and Treatment of Lumbosacral and Low Lumbar Lesions, *I. Joshua Spiegel, Major,* Medical Corps, A.U.S. (Retired) 188

EDITORIALS

The 1946 Annual Meeting 149

The Present Public Enemy No. 1 150

Thanks for the Compliment 151

Welcome Home, Doctor 152

Physicians at Home 152

P. R. N., *Charles G. Farnum, M.D.* 204

Book Reviews 58

STATE DEPARTMENT OF PUBLIC HEALTH

Tumor Diagnostic Service, Division of Cancer Control 154

PRELIMINARY PROGRAM, 1946 ANNUAL MEETING 155

CORRESPONDENCE

Refresher Courses at University of Illinois 167

Plans Announced for 1946 Clinical Congress of American College of Surgeons in New York .. 167

United States Chapter, International College of Surgeons, Meets in Detroit 168

Sugar and Treatment of Disease 168

Lawrence W. Smith, M.D., Medical Director of Commercial Solvents 168

Two Research Grants Renewed 168

HOUSE OF DELEGATES

House of Delegates Illinois State Medical Society Special Meeting — January 6, 1946 — Chicago, Illinois 169

MEDICINE AND THE ARMED FORCES

General Kirk Outlines the Remaining Task 197

Legion of Merit to Illinois Doctor 197

SN-7618 Effective Anti-Malarial Drug 198

Erection of New Army Medical Library Building Planned 198

NEWS OF THE STATE

Coming Meetings, Personals, Marriages, Deaths .. 199

★ ★

Be Sure

To Come

To The

ANNUAL MEETING

Of The

ILLINOIS STATE MEDICAL SOCIETY

PALMER HOUSE
CHICAGO
MAY 14, 15, 16

★ ★

COOPER CREME

The Original Spermicidal Creme

No Finer Name in Contraceptives. .

ACCEPTED AMERICAN MEDICAL ASSN.

Active ingredients:
Trioxymethylene 0.04% Sodium Oleate 0.67%

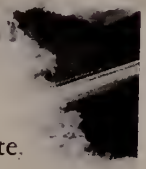
Prescribed For Over A Decade

WHITTAKER LABORATORIES, INC.
PEEKSKILL, NEW YORK



the standard in oral liver therapy

Right from the start . . . all through the years, 'Lextron' (Liver-Stomach Concentrate with Ferric Iron and Vitamin B Complex, Lilly) and 'Lextron Ferrous' (Liver-Stomach Concentrate with Ferrous Iron and Vitamin B Complex, have met every challenge in the field of oral liver therapy. Both 'Lextron' and 'Lextron Ferrous' contain the extremely potent liver-stomach concentrate, a development of the Lilly Research Laboratories. Liver-stomach concentrate exerts a therapeutic effect greatly exceeding that of the original fresh liver. Only twelve pulvules of 'Lextron' or 'Lextron Ferrous' are required daily to produce a standard reticulocyte response in clinical cases of uncomplicated, primary anemia in relapse.



Along with liver-stomach concentrate, 'Lextron' and 'Lextron Ferrous' contain adequate amounts of iron salts and a rich supply of vitamin B_1 and vitamin B_2, with other factors of the vitamin B_2 complex. Clinically standardized 'Lextron' and 'Lextron Ferrous,' designed especially for physicians' prescriptions, are available at leading drug stores everywhere.

ELI LILLY AND COMPANY • INDIANAPOLIS 6, INDIANA, U.S.A.

Wherever an estrogenic effect is desired

Diethylstilbestrol, Lilly, a crystalline synthetic estrogen, is capable of relieving symptoms of the menopause and preventing painful engorgement of the breasts postpartum. It is fully effective orally, and its wide range of dosage forms enables the physician to prescribe for oral, vaginal, or parenteral administration as he chooses. A Lilly specification on your Diethylstilbestrol prescriptions insures your patient a measure of protection which only careful standardization can provide.

ELI LILLY AND COMPANY
INDIANAPOLIS 6, INDIANA, U. S. A.





COLOR PHOTOGRAPH BY KARL OESSER

She is more than a number to him

A GENEROUS SHARE of the average physician's time is devoted to patients whose economic position is such that no financial consideration can be expected. This practice is not due to philanthropy or emotion, but to a profound sense of professional responsibility. To the doctor, the indigent patient is a living, breathing entity, not just a number on a chart. Each patient is regarded with sympathetic understanding, and to each is accorded a full measure of knowledge and skill.

In a similar sense, the manufacturer of drugs and medicines assumes a share of professional responsibility and often makes contributions that do not promise to yield financial reward. From research often conceived and carried to completion without thought of monetary return come many noteworthy achievements. Eli Lilly and Company long has been a leader in research and to its Research Laboratories can be credited a share in the development of many important therapeutic agents.



A picture of The Good Samaritan provided the inspiration that eventually led to the founding of Eli Lilly and Company

April, 1946

VOL. 89, NO. 4

The Illinois Medical Journal

Official Journal of the Illinois State Medical Society

EDITOR — Harold M. Camp. EDITORIAL BOARD — James H. Hutton, Chairman, Frederick H. Falls, Josiah J. Moore, Edwin M. Miller, Chauncey C. Maher, Harry S. Gradle, Harry Culver, Walter Stevenson, Raymond W. McNealy.

Editorials

THE 1946 ANNUAL MEETING

The 1946 annual meeting of the Illinois State Medical Society will be held at The Palmer House, Chicago, on May 14, 15, 16, and elsewhere in this issue of the Illinois Medical Journal will be found the tentative program and other information concerning the meeting.

Owing to the fact that there has been an unusual delay in recent months in getting the Journal off the press as early as was previously the case, the complete scientific program and other information concerning the meeting will be mailed to every member of the Illinois State Medical Society on or about May 1, so each member will know what is to be presented at their own meeting.

In arranging the scientific programs for the meeting, it was deemed advisable to have most of the scientific presentations made before joint sessions with the several sections participating. An exception to this is the Section on Eye, Ear, Nose and Throat, which will conduct its own meetings, and the Section on Radiology, which will have its own half day meeting for the Radiologists of this state. Other special meetings are being scheduled for Tuesday morning, May 14, as has been the custom in recent years.

The various committees and section officers responsible for the selection of speakers for these sessions, as well as the special meetings, scientific exhibits and other events necessary for the successful present day meeting, have been working diligently for some time to get their work properly accomplished. The technical exhibits have been carefully selected, and will completely fill the large exhibition hall of the Palmer House.

There will be an unusually large number of scientific exhibits principally arranged by members of the Illinois State Medical Society and which will be of especial interest to all physicians everywhere. These exhibits show the progress of medicine during the past year and they are indeed an important part of the annual meeting.

The annual dinner honoring the retiring president of the State Society will be held on Wednesday evening, and an interesting program with a prominent speaker is to be scheduled and complete information will be available within a short time.

Meetings of the House of Delegates will be scheduled for 3:00 P. M. Tuesday, May 14, and 9:00 A. M. Thursday, May 16, and it is hoped that a full attendance will be on hand with delegates present from all component county medical societies, to participate in the deliberations.

Members expecting to attend the annual meeting should make their hotel reservations early, as the number of rooms in Chicago hotels are limited and the earlier the reservation is made the better the accommodations and a definite assurance that the individuals will have a place to stay during the meeting. As has been stated above, more complete details concerning the

meeting and the complete scientific programs will be sent to the entire membership by mail on or about May 1, so that everyone will know what subjects and speakers are to be scheduled and also information concerning other features of the annual meeting.

COME TO THE ANNUAL MEETING ON MAY 14-16, AND MAKE YOUR HOTEL RESERVATIONS EARLY.

THE PRESENT PUBLIC ENEMY NO. I.

Now that the war is over, the medical profession is turning its attention from the mangled bodies of war to the countless ills of civilian life. One of these, namely malignant disease, accounts for 175,000 deaths per year in the United States; this appalling figure is more than twice the number of Americans killed per year during World War II. It ranks second among the various diseases as the cause of death in men, and first in women past middle life. An enormous percentage of these deaths is preventable by skillful medical care consisting of early diagnosis, radical operation and expert radium or x-ray radiation. Particularly for this reason, every member of the medical profession should pledge himself not to be guilty of negligence or oversight in the care of patients presenting themselves with symptoms which might possibly be of malignant disease. We are all aware of the fact that cancer is most readily curable in its incipiency. The insidious character of the disease in its early stages is the greatest obstacle to an early diagnosis, and should therefore make the physician investigate all possibilities. Many of the organs of the body are inaccessible to examination. However, with the aid of numerous diagnostic procedures and instruments available at the present time, there are very few organs, indeed, which are so inaccessible as to prevent diagnosis of early cancer. Fortunately, such organs as the skin, breast, uterus, lip and tongue, which are common sites of cancer, are so superficial that failure of early diagnosis is inexcusable. Even the stomach and colon, also very common sites of malignant disease, can be examined readily by the x-ray and with a very high incidence of accuracy; carcinoma of the rectum is one of the most common carcinomas overlooked, and we

ILLINOIS STATE MEDICAL SOCIETY

GENERAL OFFICERS, 1944-1945

PRESIDENT ..... EVERETT P. COLEMAN, Canton
PRESIDENT-ELECT ..... ROBERT S. BERGHOFF, Chicago
1ST VICE-PRESIDENT .... HARRY M. HEDGE, Chicago
2ND VICE-PRESIDENT .... WALTER C. BLAINE, Tuscola
SECRETARY-TREASURE .. HAROLD M. CAMP, Monmouth

THE COUNCIL

L. J. Hughes	1st	District, Elgin	1944
E. C. Cook	2nd	District, Mendota	1944
Oscar Hawkinson	3rd	District, Chicago	1946
Percy E. Hopkins	3rd	District, Chicago	1944
E. W. Mueller	3rd	District, Chicago	1945
Chas. P. Blair	4th	District, Monmouth	1946
Ralph P. Peairs	5th	District, Normal	1946
Walter Stevenson	6th	District, Quincy	1945
I. H. Neece	7th	District, Decatur	1946
C. E. Wilkinson	8th	District, Danville	1946
Andy Hall	9th	District, Mt. Vernon	1945
G. C. Otrich	10th	District, Belleville	1945
Ed. S. Hamilton	11th	District, Kankakee	1944
Edward H. Weld	At	Large, Rockford	1946
Chas. H. Phifer	At	Large, Chicago	1945

Chairman of the Council.....Percy E. Hopkins

ILLINOIS MEDICAL JOURNAL

Harold M. Camp, Monmouth.....Editor
L. E. Malley, Chicago....Managing Editor & Business Mgr.

GENERAL COUNSEL

Edward W. Rawlins.....77 West Washington St., Chicago

LEGISLATIVE COMMITTEE

James H. Hutton, Chairman....30 N. Michigan Ave., Chicago

EDUCATION COMMITTEE

R. R. Ferguson, Chairman..4013 N. Milwaukee Ave., Chicago
Miss Jean McArthur, Secretary.30 N. Michigan Ave., Chicago

PERMANENT COMMITTEE ON ARCHIVES

D. D. Monroe, Chairman.....Alton
C. E. Black.....Jacksonville
P. J. McDermott.....Kewanee

SCIENTIFIC SERVICE COMMITTEE

Robert S. Berghoff, Chairman..30 N. Michigan Ave., Chicago
Harold M. Camp, Secretary.....Monmouth

JOURNAL COMMITTEE

Percy E. Hopkins, Chairman.....800 W. 78th St., Chicago
Harry J. Stewart, Secretary.....715 Lake St., Oak Park

Outside of editorial or allied views or statements that are the authoritative actions of the Illinois State Medical Society, the organization denies responsibility for opinions and statements published in the ILLINOIS MEDICAL JOURNAL. Views expressed by the various authors and views set forth in various departments in the JOURNAL represent the views of the writers.

State Society will pay no bills for legal services except those contracted by the Committee. Notify the Chairman at once. Do not employ attorneys.

Send advertising copy, cuts and all communications relating to advertising to ILLINOIS MEDICAL JOURNAL, 30 N. Michigan Avenue, Chicago.

Original articles and membership correspondence to Dr. Harold M. Camp, Monmouth, Ill.

Society proceedings and news items and changes in the mailing list to Managing Editor, 30 N. Michigan Ave., Chicago 2, Illinois.

Subscription price of this JOURNAL to persons not members of the Illinois State Medical Society is $3.00 per year, in advance, postage prepaid, for the United States, Cuba, Porto Rico, Philippine Islands, Hawaiian Islands and Mexico. $4.00 per year for all foreign countries included in the postal union. Canada, $3.50. Single current copies, 50 cents.

should add, one of the easiest to diagnose. Although a change in bowel habit, or rectal bleeding, should make the physician suspect cancer of the large bowel, a lesion in the rectum, which is the most common location of cancer of the large intestine, can be diagnosed readily by the simple and efficient examination with the gloved finger. No patient complaining of rectal bleeding should get out of the doctor's office, even on the first visit, without a digital examination; likewise, if no tumor is felt and hemorrhoids or fissure are not found, examination with the proctoscope and a barium enema becomes imperative.

It is fortunate indeed that the most common cancers encountered are those associated with the highest 5 and 10 year cure rate following proper therapy. For such common cancers as those occurring in the breast, skin, uterus, rectum and colon, the 5 year cure rate in various clinics throughout the country will be 30 to 60 per cent. Cancer of the stomach, which is one of the most common cancers encountered, was originally associated with a low 5 year cure rate, but figures as high as 20 to 25 per cent are now being reported. Fortunately, the more hopeless tumors such as melanoma, lymphosarcoma, etc. are comparatively uncommon. The good prognosis predictable following early treatment of the common malignancies is an added reason for the necessity of conscientious, thorough examination of all patients who may possibly have a carcinoma. The sin of missing the diagnosis of a curable disease is many times that of overlooking an incurable disease.

The public is rapidly becoming educated to the fact that cancer is curable in its early stages and relatively incurable in its late stages. People are coming to the physician more and more frequently for examination for the possible presence of malignant disease. The profession must be patient under such circumstances, even though frequently the true cause of the patient's visit is cancer phobia, because the disease is so insidious and amenable to therapy only in its early stages.

The medical officers in the recent World War struggled hard and expended no end of time and energy to save a single life. It would be a rare predicament if this same conscientious attitude toward the saving of life did not also exist in civilian life. The shift back to normal times will remove the last acceptable excuse, namely inadequate time for examination of the patient. Let us all, therefore, resolve not to be guilty of negligence or inefficiency in our duty and privilege so generously extended us by the honor of the medical profession.

THANKS FOR THE COMPLIMENT

During recent months, many dozens of letters have been received by the Editor asking why the Illinois Medical Journal had not been received by one entitled to the Journal each month. In a number of instances a second letter was received a few days later thanking us for sending the journal so promptly after receiving the previous letter.

Those responsible for the publication and mailing of the Journal appreciate the interest shown in our official publication, and it is most gratifying to learn that members of the State Medical Society, as well as some exchanges and other subscribers, look forward to receiving it each month and actually miss it when it fails to appear at the usual time, but there are some factors worth relating, yet which are as a whole not due to any negligence on our part.

We all know, of course, that for nearly four years we had a war on, which required the complete manpower of the country either in combat, in training, in industry and the professions working together to do their part in winning the war. There was a manpower shortage in our printing plants, and there was no opportunity for the printers to add to their equipment, which like other mechanical devices during war time, deteriorated through constant use.

Formerly we could tell each month what day the journals would be off the press, bound and in the mails, but we no longer endeavor to do that for with ever increasing number of colors in certain advertisements, each color requiring an additional day, and with other extra duties not previously required in connection with printing the journal, there has been an increasing delay, which we hope will be remedied in the not distant future.

Those entitled to the Illinois Medical Journal will receive their copy regularly each month unless a plate will be broken or thrown out of

the addressograph machines, then we can only remedy the situation when a subscriber does fail to get the Journal and notifies the editor or business manager of this fact. Under such conditions we immediately check with the addressing company and see that a new stencil is made and the individual once more is on the mailing list.

We hope that everyone entitled to receive our Journal will actually receive it within a reasonable time and, of course, if it does fail to arrive, we will appreciate hearing from you, and all complaints will receive immediate attention. On the other hand, we are delighted to know that our Journal is appreciated, and it is invariably an incentive for the entire Journal staff to endeavor to improve the Journal in every way possible to make it what it should be, the official publication of the Illinois State Medical Society.

The following tribute to the returning Medical officers appeared in a recent issue of *Collier's* and we are publishing the editorial as they published it.

WELCOME HOME, DOCTOR

"Doctors who served in the war are coming home in considerable numbers now, and in many communities you can hear sighs of relief plus the frequent remark: "Well, thank heaven, I can get sick now." Welcome-home editorials are appearing in local news papers as favorite physicians return; testimonial dinners are being thrown profusely; the medical veterans are being invited to address Rotary, Kiwanis, etc., luncheons; and all this and that.

"It's all very nice, and no doubt the doctors are pleased. We think, however, that we have an idea for a welcome-home program which any community can stage, and which should be of substantial benefit to the doctors so welcomed.

"In honor of each physician who comes back from the wars, how about a Pay The Guy What You Owed Him When He Left If You Owed Him Anything movement?

"Most doctors are poor bill collectors. Many people let the doctor's bills go till the last. Many others just nonchalantly forget about the doctor's bills — and squawk fiercely if he squawks at all. It all adds up to the fact that on practically every doctor's books are large amounts in unpaid bills. He could very conveniently use that money after several years in service on modest service pay.

"No bands, luncheons, reception committees, etc., are needed for this Pay The Guy, etc., movement. All that is required is a mass migration to the mailboxes by doctors' debtors with envelopes containing checks or money orders in their hands. The ceremony is guaranteed to make the debtor as well as the doctor feel better."

PHYSICIANS AT HOME

The following Illinois physicians have been separated from the service since the last list published in the Journal:

Ahroon, Carl R. Jr., Bloomington
Allyn, Richard, Springfield
Barkett, Soddie J., Heyworth
Barton, Edwin G. Jr., Streator
Becker, Carl M., Freeport
Beecher, Merrill C., Knoxville
Berchtold, Henry F., Springfield
Bianco, Peter B., Peoria
Blender, William Jr., Peoria
Borden, George, Quincy
Borin, George M., Peoria
Borkon, Eli L., Carbondale
Bowman, Howard O., San Jose
Branch, Charles D., Peoria
Brown, Leo J., Carbondale
Bryan, Fred M., Chenoa
Bufkin, Lindley L., Wenona
Burt, Elliott P., Peoria
Buttemiller, George, Libertyville
Caddick, Earl Jr., Quincy
Chestnut, Nelson H., Springfield
Coolcy, William Jr., Peoria
Curtis, John Stevens, Danville
Davies, Raymond E., Spring Valley
Davis, John L., Quincy
Davis, Landus Y., Baylis
Debartalo, Hansel, Aurora
Dettman, Everett F., Belvidere
Dewhirst, Ernest M., Danville
Dilts, Preston V., Springfield
Droege, Edward H., Granite City
Duff, Alexander M. Jr., Galesburg
Dunn, Edward H., Elgin
Ellis, Joseph G., Georgetown
Engle, David E., Champaign
Esposito, Andrew R., Carbondale
Evans, Edward G., Aurora
Ewald, William L., Waukegan
Faulk, Elliott, Athens
Foley, John D., Waukegan
Forrest, Thomas F., Woodstock
Freeland, John E., Waukegan

Friedman, Harold S., Decatur
Gardner, Clarence L., Aurora
Gernon, William, Kankakee
Gilman, George E., Streator
Glashagel, Erwin E., Elgin
Gleason, Michael, Mendota
Goran, Jas. Robert, Erie
Greenwood, Lilburn S., Shelbyville
Gustafson, Jos. G., Moline
Hartman, Clifford D., Sublette
Hawthorne, Roy O., Kankakee
Hirchfield, Stanley A., Zion City
Hochberg, Paul P., Monmouth
Hoernschemeyer, Jos. L., Granite City
Hollingsworth, R. S., Decatur
Hoover, Seldon R., Quincy
Huml, Anton P., Peoria
Hurley, Douglas C., Elgin
Hybke, Zenan S., LaSalle
Ireland, Harry J., Peoria
Johnston, Charles W., Waverly
Jordon, Roland F. K., Pekin
Josselyn, Livingston, Highland Park
Kannapel, Lowell E., Peoria
Kaplan, George P., Rockford
Karay, George N., Wyoming
Keller, John E., Streator
Ketay, Joseph M., Peoria
King, Walter W., Peoria
Krajec, Andrew, West Salem
Kweder, David J., Waukegan
Law, Stanley G., Naperville
Lipton, Saul I., Orion
Litterst, Lawrence J., Hanna City
Lowrey, Robert D., Manhattan
Lucas, Nicholas, Braidwood
Lynch, James I., Peru
Malcolm, William A., Peoria
May, Edwin R., Chester
McCullough, Clifford P., Lake Forest
McGinnis, Philip C. Jr., Joliet
McIntosh, James R., Bloomington
McNertney, Frank D., Bloomington
Meier, Francis X., Milan
Mercer, Ray, Quincy
Micheal, Oscar J., Danville
Miller, Herbert P., Rock Island
Mohlenbrook, William D., Murphysboro
Moore, Bert E., Danville
Mulliken, Oscar D., Elgin
Neeseman, Arthur C., Fox Lake
Nehf, Albert H., Kankakee
Neuchiller, Bernard B., Woodstock
Nierenberg, Paul S., Albion
Norris, Harold V., Jacksonville
Parsons, Harold H., Moline
Patton, Robert J., Springfield
Petrazio, Joseph A., Ava
Pfeiffer, Carl F. H., Quincy
Poska, Theodore A., Moline
Ramenofsky, Abraham I., LaSalle
Raymond, Frank K., Aurora
Rettinger, Leo M., Elburn
Rian, Oliver, East Peoria
Rideout, William E., Freeport
Robbins, Robert H., Waukegan
Roberts, Earl L., Cissna Park
Rodewald, Herbert H., Murphysboro
Roseman, Leo L., Champaign
Rosenthal, Martin J., LaSalle
Ross, Charles A., Galesburg
Schettler, Robert E., Red Bud
Schipper, Irving S., Galesburg
Schochet, Sydney S., Bloomington
Schreiber, Norman J., St. Charles
Schroder, Harold M., Pontiac
Schweiger, Lamont R., Decatur
Sehring, George H., Joliet
Seifert, Edward H., Avon
Seymour, Guy E., Mattoon
Sharp, John R., Girard
Sibilsky, Carl E., Peoria
Silverman, Meyer, Seneca
Slater, Roland A., Peoria
Smith, William W., Gurnee
Sutton, Charles F., Springfield
Snavely, John R., Sterling
Stanbery, George A., Vandalia
Sternberg, Thomas H., Peoria
Stevenson, Walter D. Jr., Quincy
Suino, John B., LaSalle
Sullivan, Timothy, Sterling
Taylor, John B., Carbondale
Thelen, Leo L., Elgin
Tobin, John R. Jr., Elgin
Toomajan, Harry J., Grayslake
Toomey, Thomas N., Springfield
Topcik, Aaron A., Waukegan
Tourney, Guy L., Quincy
Vesely, Harry C., Peoria
Ward, Edward J., Peoria
Warren, Harry A., Peoria
Weatherly, James A., Murphysboro
Wente, Constantine F., Dundee
Werner, William B., Pekin
Werth, Joseph A., Waterloo
Whitaker, Walter M., Quincy
Williamson, Ben K. W., Moline
Wittenberg, Carlton E., Woodstock
Wollak, Charles, Joliet
Woodruff, Lewis W., Joliet
Wright, Nelson A. Jr., Pekin
Wunsch, Charles L., Aurora

State Department of Public Health

TUMOR DIAGNOSTIC SERVICES
DIVISION OF CANCER CONTROL

Because it is felt that maximum advantage is not being taken of the facilities of the Tumor Diagnostic Services, we are giving below a short recapitulation of what these Services have to offer particularly for the benefit of those physicians who have returned from military service.

These Services were begun in 1941 with formal approval of the House of Delegates of the Illinois State Medical Society. They are designed to provide convenient consultation facilities for the general practitioner in the care of his cancer cases without charge to himself or his patient.

Any physician may refer a suspected tumor case to these Services for diagnosis by the Tumor Service Staff. Preferably, the physician should accompany the case; but if this is not convenient a brief written history should be sent with the patient. After the diagnosis and recommendations for treatment are made, the case is directed back to the referring physician for such disposition as he may care to make of it. All patients are admitted without charge, except when hospital procedures are necessary to complete the diagnosis.

No treatment is rendered by any of the Services with the exception of the one located at the Research Hospital, Chicago. At the Chicago Service, medically indigent patients who are approved by the Social Welfare Department of the Hospital will be treated without charge.

As a supplementary feature of the Tumor Diagnostic Services specimens of suspected *tumor* tissue from *medically* indigent patients, submitted by physicians throughout the State, are accepted for microscopic diagnosis without charge. Mailing containers and forms for the presentation of necessary clinical data regarding such tissues can be obtained from the Division of Cancer Control, Springfield, Illinois, or through any of the Diagnostic Services.

It is very important that the forms accompanying the tumor tissue be completely filled out and contain all pertinent data. In the past some specimens have been submitted without the patient's name or with little or no information relating to the patient. Not infrequently the physician fails to sign the request form certifying to the effect that the patient cannot afford to pay for the examination. Also, instead of using the proper request form, the specimen has been accompanied by nothing more than a simple request for pathological examination on an ordinary piece of paper. Following the proper procedure in requesting examination of tumor tissue will greatly aid the pathologist in rendering his report.

The location of existing Tumor Diagnostic Services is as follows: Burnham City Hospital, Champaign; Research Hospital, University of Illinois College of Medicine, Chicago; Christian Welfare Hospital, East St. Louis; St. Anthony's Hospital, Rockford; and Memorial Hospital, Springfield.

If physicians will send tissue specimens to the Tumor Diagnostic Service nearest them it will expedite the rapidity with which pathological reports will be forthcoming.

The Baltimore and Ohio Railroad is the first major railroad to provide chest x-ray service for its employees. Tuberculosis Topics, Nat. Counc. of Jewish TB Inst., Dec., 1945.

PRELIMINARY PROGRAM

OF THE

One Hundred Fifth Annual Meeting

Illinois State Medical Society

CHICAGO, ILLINOIS

PALMER HOUSE

MAY 14, 15, 16, 1946

Headquarters for Annual Meeting



THE PALMER HOUSE

All sessions of the Annual Meeting as well as the annual dinner will be held in this famous hotel. In the center of Chicago's downtown, it is convenient to shops and theatres.

Tentative Program

of

PAPERS FOR 1946 ANNUAL MEETING

TUESDAY EVENING, ORATION IN SURGERY — GALL BLADDER IN COMMON DUCT PROBLEMS
Robert Lee Sanders, Memphis

WEDNESDAY MORNING, ORATION IN MEDICINE — Ralph Major, Kansas City, Mo.

JOINT SESSION OF SECTIONS ON MEDICINE: SURGERY: PUBLIC HEALTH AND HYGIENE: RADIOLOGY: PEDIATRICS: OBSTETRICS AND GYNECOLOGY AND PATHOLOGY

TUESDAY AFTERNOON, May 14, 1946
Grand Ballroom, Palmer House

2:00 p.m. — Importance of Pulmonary Disease: A Community Problem
Arthur S. Webb, Glen Ellyn

2:30 p.m. — Bronchoscopy as an Aid in the Diagnosis of Pulmonary Disease
Paul H. Holinger, Chicago

3:00 p.m. — New Laboratory Methods in Diagnosis of Tuberculosis
Henry C. Sweany, Chicago

3:30 p.m. — Motion Pictures (Case Findings in Tuberculosis)
Raymond H. Runde, Peoria

4:00 p.m. — Management of Acute Craniocerebral Trauma
Major H. Russell Meyers, M.C., Mayo General Hospital, Galesburg

4:30 p.m. — Changes Occurring During Malnutrition: Observations in Santo Tomas Internment Camp, Manila
Emmet F. Pearson, Springfield

5:00 p.m. — Rehabilitation of the Hard of Hearing
Speaker to be contacted by Dr. Mudd

WEDNESDAY MORNING, May 15, 1946
Grand Ballroom, Palmer House

9:00 a.m. — Rh Factor
I. Davidsohn, Chicago

9:30 a.m. — Pathology of Rheumatic Fever
Eleanor M. Humphreys, Chicago

10:00 a.m. — Treatment of Acute Rheumatic Fever in Young Adults
Henry A. Warren, Peoria

10:30 a.m. — Diarrhea in Infancy
Parker Dooley, Chicago

11:00 a.m. — Oration in Medicine

WEDNESDAY AFTERNOON, May 15, 1946
Grand Ballroom, Palmer House

2:00 p.m. — Physiology of Infectious Diseases of the Liver
George E. Wakerlin, Chicago

2:30 p.m. — Newer Aspects in the Treatment of Liver Disease
George F. O'Brien, Chicago

3:00 p.m. — Indications for Antibiotics (Penicillin and Streptomycin) in Urinary Tract Infections
Russell D. Herrold, Chicago

3:30 p.m. — Practical Points in Shock Therapy
Francis J. Gerty, Chicago

4:00 p.m. — Hazards in the Use of Sedatives: Bromide Intoxication
F. Garm Norbury, Jacksonville

THURSDAY MORNING, May 16, 1946
Grand Ballroom, Palmer House

9:00 a.m. — Phlebothrombosis
Walter W. Carroll, Chicago

9:30 a.m. — Periodic Examinations
Augusta Webster, Chicago

10:00 a.m. — Anesthesia in Obstetrics
James E. Fitzgerald, Chicago

10:30 a.m. — Early Diagnosis in Treatment of Cancer of the Pancreas
Alexander Brunschwig, Chicago

11:00 a.m. — Diagnosis of Accessible Cancer
Danely P. Slaughter, Chicago

11:30 a.m. — Diagnosis and Treatment of Cancer of the Colon
Warren H. Cole, Chicago

Meetings of Special Groups

MEETINGS OF THE HOUSE OF DELEGATES

TUESDAY AFTERNOON, MAY 14, 1946
FOYER OF THE GRAND BALLROOM

3:00 p.m. The first meeting of the House of Delegates called to order by the President for Report of Officers, Councilors, Committees, Appointment of Reference Committees, Introduction of Resolutions, and for the transaction of other business which may come before the House.

THURSDAY MORNING, MAY 16, 1946
RED LACQUER ROOM

9:00 a.m. The second meeting of the House of Delegates called to order by the President for the Election of Officers, Councilors, Committees, Delegates and Alternates to the American Medical Association, Reports of Reference Committees and action on same, action on Resolutions, and

for the transaction of other business to come before the house.

PHYSICIANS' ASSOCIATION
DEPARTMENT OF PUBLIC WELFARE
STATE OF ILLINOIS

TUESDAY MORNING, MAY 14, 1946
PALMER HOUSE, CHICAGO

J. W. Klapman ..... President
D. J. Brown ..... 1st Vice President
J. R. Hunter ..... 2nd Vice President
H. R. Johnson ..... Secretary-Treasurer
E. Liebert ..... Chairman, Program Committee

"Psychiatry in the Illinois State Training School for Boys"
J. Marx, St. Charles

"Child Psychiatry and the Practice of Medicine"
H. Greenberg, I.J.R.

"The Brain in Infantile Cerebral Palsy"
H. Josephy, Chicago

"A Rorhschach Study of a Pair of Schizophrenic, Identical Twins"
J. Endacott, Manteno

"Modern Conception of Heredity"
H. Neuer, Lincoln

"Reflections Based on Psychiatric Work in an Army General Hospital in the ETO"
G. Perkins, I.J.R.

"Treatment of Neurological Disorders with Tridione"
(to be read by title)
E. Liebert, Elgin

SECRETARIES' CONFERENCE
E. F. Moore, Chairman ..... Collinsville
G. A. Barnett, Vice-Chairman .... Riverside
John O. Heald, Secretary ..... Rockford

VETERANS' SERVICE COMMITTEE DINNER CONFERENCE
Harold C. Lueth, Chairman

FIFTY YEAR CLUB LUNCHEON
Andy Hall, Chairman

MATERNAL WELFARE LUNCHEON
F. H. Falls, Chairman

AMERICAN COLLEGE OF CHEST PHYSICIANS
(Illinois Chapter)
K. G. Bulley, Chairman

CENTRAL STATES SOCIETY OF INDUSTRIAL MEDICINE AND SURGERY
F. P. Hammond, Secretary

ALUMNI LUNCHEONS
Howard B. Carroll, General Chairman

MEDICAL WOMEN'S ASSOCIATION
E. Stenhouse, Chairman

PRELIMINARY PROGRAM
WOMAN'S AUXILIARY TO THE
ILLINOIS STATE MEDICAL SOCIETY
Eighteenth Annual Meeting
CONGRESS HOTEL
May 14, 15, 16, 1946

Tuesday, May 15, 1946

9:00 A.M. Registration—Florentine Lounge, 3rd Floor

10:00 A.M. Pre-Convention Board Meeting—Parlor A, 3rd Floor

1:30 P.M. Opening General Meeting — Florentine Room, 3rd Floor

7:00 P.M. Dinner—Florentine Room, 3rd Floor

Wednesday, May 15, 1946

9:00 A.M. Registration—Florentine Lounge, 3rd Floor

9:45 A.M. General Meeting—Florentine Room, 3rd Floor

12:30 P.M. President's Luncheon—Grand Ballroom, 2nd Floor

3:00 P.M. Post-Convention Board Meeting, Parlor A, 3rd Floor

Scientific Exhibits

John A. Mart, M.D. — Chairman
Harvey S. Allen, M.D.
C. C. Mason, M.D.

Surgery of the Stomach

10 Placques, 28"x24" showing history of gastric surgery from 1849 to 1940. Indications and illustrations of gastroenterostomy, anterior, posterior and Leahy's anterior. Indications and illustrations of gastric resections with various modifications of the Billroth No. 2. Gastrostomy, gastro-

tomy, and pyloroplasties. Anatomy of the stomach showing the arteries, veins, and lymphatics. Photographs of X-rays of patients pre- and post-operative. Also photographs of X-rays pre- and post-operative of gastro-jejunal-colic fistulae, a complication of a posterior gastroenterostomy. 800 Ft. of colored motion picture showing technique of a Moynihan short loop antecolic gastric resection for carcinoma.

Arkell M. Vaughn, M.D., John W. Howser, M.D., William E. Lees, M.D.

From Loyola University School of Medicine, Mercy Hospital and Cook County Hospital.

Antibiotic Therapy of Subacute Bacterial Endocarditis

Graphic charts, gross specimens and color transparencies of gross specimens and microscopic sections illustrating course and duration of treatment, what constitutes an adequate daily dose of penicillin, clinical criteria for judging success of therapy, lack of necessity for anti-coagulents, unreliability of negative blood cultures as criteria of success, pathogenesis, associated myocardial lesions, and mechanism of healing. 3 patients treated with streptomycin are included.

Walter S. Priest, M.D., Jacques Smith, M.D., Charles J. McGee, M.D., Eugene Hildebrand, M.D.

From Northwestern University School of Medicine and Wesley Memorial Hospital.

Nerve Regeneration in Sutures, Contusions and Grafts

Viewing box containing colored lantern slides.

Frederick Hiller, M.D.

From Northwestern University School of Medicine Department of Surgery (Loyel Davis, M.D.)

Allergic Conditions — Diagnosis and Treatment

Display of x-ray films of asthmatic chests showing emphysema, bronchiectases, etc.; kodachrome transparencies of chest abnormalities in asthmatic individuals, positive skin reactions, eosinophilia in blood, sputa and nasal smears, etc.; microscopic slides demonstrating pollen and mold counts, and eosinophilia; framed placards explaining differential diagnosis, treatment and results of treatment in asthma; cultures of molds; demonstration of technique of patch tests, intradermal and scratch tests; lectures at stated intervals if possible.

Leon Unger, M.D. and Isabelle Brandt, M.T.

From Northwestern University School of Medicine.

Vascular Disorders of the Nervous System. Clinical and Pathological Studies on the Feebleminded. Activities in the Illinois Department of Public Welfare

Gross specimens, x-ray films, charts and pictures.

Illinois Department of Public Welfare and Neuropsychiatric Institute.

Illinois Department of Public Welfare.

Program for Graduate Training in Surgery and Surgical Specialties — Cancer Clinics

Posters showing the function of the graduate training in surgery program of the American College of Surgeons. Posters and charts showing increase in number of cancer clinics and in their community service. Greater support being rendered them by local and national organizations.

American College of Surgeons

Transurethral Drainage of Seminal Vesicles. Catheterization and Dilatation of Ejaculatory Ducts

Framed prints of x-rays of visualization of seminal tract in health and disease with descriptive data, drawings of technic.

Exhibit box with transparent cleared specimens of seminal tract, bladder neck and bladder.

Robert H. Herbst, M.D. and James W. Merricks, M.D.

From University of Illinois (Rush) College of Medicine and Presbyterian Hospital.

Restoration of Nasal Physiology by Reconstructive Surgery

Trauma, infections, developmental anomolies and tumors produce nasal deformities which interfere with normal respiration.

Corrective nasal surgery consists of:

1. Surgery of External nasal pyramid
2. Surgery of the nasal Septum
3. Surgery of the columella

Photographs, drawings and wax models illustrate typical deformities and details of newer operative procedures.

M. H. Cottle, M.D. and R. M. Loring, M.D.

From Illinois Masonic Hospital and Children's Memorial Hospital.

Medical Coins and Medals

Medals and coins commemorating events important in the history of medicine: famines, epidemics, vaccination etc.

Joseph P. Reich, M.D.

Gerontology

Graphic pictures on the effects of ageing processes on chewing, digestion and absorption; composition of U.S.A. population according to changing age groups; incidence of disease and disability in the older age groups.

Jacob Meyer, M.D.

Bronchogenic Carcinoma

Symptomatology, Gross and Microscopic Findings in 175 proved cases. Charts, photographs of gross specimens and photomicrographs of bronchogenic carcinoma. The symptomatology and characteristic findings are described and illustrated, and statistical analyses of 175 proved cases of bronchogenic carcinoma are presented.

Paul H. Holinger, M.D., Edwin F. Hirsch, M.D. and Albert H. Andrews, Jr., M.D.

From St. Luke's Hospital and University of Illinois College of Medicine.

Correlative Study of Cardiac Diseases

Translite films for correlative study of x-rays, ECG's and pathological specimens of most common cardiac diseases to emphasize the clinical and diagnostic values of various methods of examination.

Irving Treiger, M.D.

Presbyterian Hospital.

Varicose Veins of the Lower Extremity

Ten illustrations showing:

1. Anatomy of the venous circulation of the lower extremity.
2. Varicosities of the long saphenous vein with its tributaries.
3. The short saphenous vein with its tributaries.

4. The femoro-popliteal vein.
5. Gluteal veins.
6. Trendelenburg constriction test.
7. Trendelenburg release test.
8. Perthe's test.
9. Barone's multiple Perthe's test.
10. Operation of vein ligation.

Anthony M. Barone, M.D.

Hematology

10 or more Kodachrome negatives used as transparencies of blood and bone marrow in health and disease.

10 or more enlargements of the same in color.

2 charts showing the physiology and pathology of the hemopoetic principle.

Carroll L. Birch, M.D. and Louis R. Limarzi, M.D.
From University of Illinois College of Medicine.

Infectious Hepatitis

This rapidly increasing virus disease chiefly affecting the liver is portrayed in a series of illustrated figures, graphs and charts covering the Etiology, symptoms, physical findings, laboratory tests with special reference to diagnosis in early and late stages both with and without jaundice.

M. H. Barker, M.D. and R. B. Capps, M.D.
From Northwestern University Medical School.

Puerperal Sepsis

The exhibit consists of 11 sculptural models, 2 moulages, halftone and water color illustrations designed as a visual educational medium to depict the etiology, pathology and treatment of puerperal sepsis. Micro photographs illustrating the histopathology of saprophytic, pyogenic and neisserian infections. Graphs showing clinical course of pyogenic infections treated by sulphonamides or penicillin.

Frederick H. Falls, M.D., Miss C. S. Holt.
From University of Illinois Medical School and Illinois State Department of Health.

The Interpretation of the Positive Wassermann in Nonsyphilitic Dermatoses

Charts and photographs, illustrating the syndromes in which a positive Wassermann sometimes occurs. The types of serological reactions are charted and also extensive instructions on how to determine as far as possible the meaning of the Wassermann reactions when it is probably a false biological one.

Cleveland J. White, M.D., Charles G. Gilbert, M.D., Robert C. Ranquist, M.D., Kenneth C. Baker, M.D.
From Loyola University School of Medicine and Loyola University Mercy Hospital Clinics.

Anal Tightness and Its Relation to Pecten — Pectenosis and Pectinotomy (Histo-Pathological Study)

Drs. Miles and Abel of London described a most interesting and important explanation for Anal Tightness, namely: Pectenosis (a fibrous connective tissue infiltration of the sub-epithelium of the pecten area). Their articles inspired us to study microscopically the histological anatomy of the anal area in dogs, rabbits and the newborn to prove microscopically that pectenosis does not exist in the normal anal canal but develops in the path of chronic ano-rectal infection such as is associated with cryptitis, papillitis fissure-in-ano, pruritus ani, and hemorrhoids. A successful operation called pectenotomy is suggested to alleviate this condition of pectenosis.

Manuel G. Spiesman, M.D.
From Mt. Sinai and Edgewater Hospitals.

Gelatin Sponge — Studies on Absorption and Hemostatic Action

The absorption of gelatin sponge in liver and other tissues is demonstrated by photomicrograph. The hemostatic action of gelatin sponge is shown in a series of photographs of wounds in the liver and spleen in which the gelatin sponge has controlled the bleeding without the aid of thrombin or sutures. Control studies are presented where soluble cellulose and fibrin foam were used. Data on the clinical use of gelatin sponge is also presented.

Hilger Perry Jenkins, M.D., Rudolph Janda, M.D., James Clarke, M.D. (Ormand Julian, M.D., U. of Ill. Med. School).
University of Chicago, Department of Surgery.

Biopsy Technique for Cause and Detection in General Practice or Alternate Exhibit

---

Pulmonary Tuberculosis and Other Diseases of the Chest. Differential Diagnosis and Treatment.

3 illuminated cabinets demonstrating by x-ray and pathologic specimens, diseases of lungs, tuberculosis, tumors etc.

Karl J. Henrichsen.
Municipal Tuberculosis Sanitarium

Low Back Pain

Functional decompensation of the back. Posters describing and illustrating the symptom complex due to functional decompensation: the symptoms; the findings; the secondary symptoms and findings. Illustrations to show the mechanical development of the pathological changes. The technique for correction, the rationale for treatment and an illustration of the technique by means of models. Apparatus to demonstrate the method of application of the plaster of Paris jacket. Posters to define the underlying principles of the method. Illustrations to demonstrate the technique. Demonstration of rehabilitation of the patient by means of periodic rest and exercises by means of figures and posters.

Emil D. W. Hauser, M.D.

Gastroscopy as An Aid in the Diagnosis and Treatment of Gastric Diseases

Charts, movies and demonstrations.

Leo L. Hardt, M.D.
Cook County Post Graduate School
John S. Coulter, M.D.
Loyola University School of Medicine
Frederick Steigmann, M.D.
Northwestern University
Jack Rabens, M.D.
University of Illinois
Cook County Hospital
Illinois Central Hospital
Chicago Municipal Tuberculosis Sanitarium

Calcifying Tendinitis

X-ray films, drawings and posters.

Vernon C. Turner, M.D., Newton C. Mead, M.D., Robert Hutchinson, M.D.
From Evanston Hospital.

Plastic Reconstructions About the Face

Photographs and drawings of plastic reconstruction with movie of correction of prognathic jaw.

J. E. Schaefer, M.D. and Ralph C. Rudder, M.D.
From Cook County Hospital.

Experimental Peripheral Nerve Surgery

Colored slides showing end to end sutures; autogenous and homogenous grafts in animals. Colored microphotographs showing organization and regeneration processes in repaired peripheral nerves and grafts.

George Perret, M.D.
From Northwestern University Medical School.

Clinical Allergy

Colored slides and posters.

Theron G. Randolph, M.D.

Mechanism of Amphetamine Induced Weight Loss

Experimental data from this laboratory will be presented to explain the possible ways by which amphetamine facilitates loss of body weight. Specific Mechanisms include: Anorexia — Peripheral origin; Central; Diuresis; Metabolic Influence.

Drs. Stanley C. Harris and A. C. Ivy.
From Northwestern University Medical School.

Anatomy and Surgery of Inguinal Hernia

Framed cards with drawings and legends demonstrating anatomical dissections in normal subjects and in specimens with hernia. Also methods of repair based on above.

Leo M. Zimmerman, M.D., Barry Anson, M.D., Harold Laufman, M.D.
Northwestern University Medical School.

Illinois Public Aid Commission Medical Care Program

Pictures, Charts and Maps describing phases of the Commission's Medical Care program.

Raymond M. Hilliard, Public Aid Director
Illinois Public Aid Commission.

Endocrine Products: Actions and Uses

Information available on actions and uses of endocrine products known to be of worthwhile therapeutic value in the control of endocrine disorders and other diseases. Also information to help clarify the present confusing nomenclature situation and the confusion that exists concerning units and weight measures.

Austin E. Smith, M.D., Walton VanWinkle, M.D.
Council on Pharmacy and Chemistry — American Medical Association.

Continuous Caudal Technic

Life size colored moulage models depicting 12 steps in Continuous Caudal Catheter technic. Charts, diagrams and drawings illustrating the history, indications, contraindications, drugs employed, method of preparing preferred solution, advantages of using vasoconstrictor, and detailed statistical results in a series of 500 vaginal deliveries managed with Continuous Caudal Analgesia using Pontocaine-Suprarinin-Isotonic saline solution.

Hugh O. Brown, M.D., James M. Thomson, M.D., James E. Fitzgerald, M.D.
Cook County Hospital.

Fractures of the Hip

An indirect method for maintaining fixation in reduction of Intra-Capsular Femoral neck Fractures.

A. A. Mertz, M.D.
Decatur, Illinois.

Technical Exhibitors

1946 Annuad Meeting

Abbott Laboratories, North Chicago, Illinois
A. S. Aloe Company, 1831 Olive Street, St. Louis, Missouri
The Ames Company, Elkhart, Indiana
American Hospital Supply Corporation, 1086 Merchandise Mart, Chicago
The Armour Laboratories, U. S. Yards, Chicago
Ayerst, McKenna & Harrison, Ltd., 22 East 40th Street, New York, New York
Bilhuber-Knoll Corporation, Orange, New Jersey
Ernst Bischoff Company, Ivoryton, Connecticut
The Borden Company, 350 Madison Avenue, New York, New York
Brooks Appliance Company, 5 North Wabash Avenue, Chicago, Illinois
The Burdick Corporation, Milton, Wisconsin
Burroughs Wellcome & Co., 9 East 41st Street, New York, New York
Cambridge Instrument Company, Inc., 3732 Grand Central Terminal, New York, New York
Camel Cigarettes, One Pershing Square, New York, New York
Cameron Surgical Specialty Company, 666 West Division Street, Chicago, Illinois
The Carnation Company, Oconomowoc, Wisconsin
Chicago Pharmacal Company, 5547 North Ravenswood Avenue, Chicago, Illinois
Ciba Pharmaceutical Products, Inc., Summit, New Jersey
The Coca Cola Company, Atlanta, Georgia
F. A. Davis Company, 1914 Cherry Street, Philadelphia, Pennsylvania
The DeVilbiss Company, 300 Phillips Avenue, Toledo, Ohio
Doak Company, Inc., 2132 East 9th Street, Cleveland, Ohio
Doho Chemical Corporation, 58 Varick Street, New York, New York
Electro-Physical Laboratories, Inc., 315 S. Honore Street, Chicago, Illinois
Eli Lilly & Company, Indianapolis, Indiana
C. B. Fleet Company, Lynchburg, Virginia
Flint, Eaton & Company, Decatur, Illinois
Freeman X-Ray Company, 4647 North Cicero Avenue, Chicago, Illinois
General Electric X-Ray Corporation, 2012 Jackson Blvd., Chicago, Illinois
Gerber Products Company, Fremont, Michigan
H. J. Heinz Company, Pittsburgh, Pennsylvania
Hoffman-La Roche, Inc., Nutley, New Jersey
Hospital Liquids, Inc., 843 West Adams Street, Chicago, Illinois
The Hygeia Nursing Bottle Company, Buffalo, New York
Jones Metabolism Equipment Company, 315 South Honore Street, Chicago, Illinois
Kelley-Koett Manufacturing Company, Covington, Kentucky
Lea & Febiger, Publishers, 600 Washington Square, Philadelphia, Pennsylvania
Lederle Laboratories, 30 Rockefeller Plaza, New York, New York

Libby, McNeill & Libby, U. S. Yards, Chicago, Illinois
J. B. Lippincott Company, East Washington Square, Philadelphia, Pennsylvania
M & R Dietetic Laboratories, Inc., 585 Cleveland Avenue, Columbus, Ohio
Mead Johnson & Company, Evansville, Indiana
Medical Arts Supply Company, 500 South Wolcott Avenue, Chicago, Illinois
Medical Film Guild, 167 West 57th Street, New York, New York
The Medical Protective Company, Fort Wayne, Indiana
The Mellin's Food Company, 41 Central Wharf, Boston, Massachusetts
The Mennen Company, 345 Central Avenue, Newark, New Jersey
William S. Merrell Company, Cincinnati, Ohio
The C. V. Mosby Company, 3207 Washington Avenue, St. Louis, Missouri
V. Mueller & Company, 408 South Honore Street, Chicago, Illinois
Ortho Pharmaceutical Corp., Elizabeth, New Jersey
Parke, Davis & Company, Detroit, Michigan
E. L. Patch Company, Stoneham Post Office, Boston, Massachusetts
Pet Milk Sales Corporation, 1401 Arcade Building, St. Louis, Missouri
Philip Morris & Co. Ltd. Inc., 119 Fifth Avenue, New York, New York
Picker X-Ray Corporation, 300 Fourth Avenue, New York, New York
Poloris Company, Inc., 12 High Street, Jersey City, New Jersey
W. B. Saunders Company, West Washington Square, Philadelphia, Pennsylvania
Schering Corporation, Bloomfield, New Jersey
G. D. Searle & Company, P. O. Box 5110, Chicago, Illinois
Sharp & Dohme, 640 Broad Street, Philadelphia, Pennsylvania
Smith, Kline & French Laboratories, Fifth & Arch Streets, Philadelphia, Pennsylvania
Spencer, Incorporated, New Haven, Connecticut
E. R. Squibb & Sons, 745 Fifth Avenue, New York, New York
Standard X-Ray Company, 1932 Burling Street, Chicago, Illinois
Frederick Stearns & Company Division, Detroit, Michigan
Sutliff & Case Company, Inc., Peoria, Illinois
U. S. Standard Products Company, Woodworth, Wisconsin
Universal Products Corporation, Norristown, Pennsylvania
Westwood Pharmacal Corporation, 1280 Main Street, Buffalo, New York
White Laboratories, Inc., 605 Broad Street, Newark, New Jersey
Winthrop Chemical Company, Inc., 170 Varick Street, New York, New York
Zimmer Manufacturing Company, Warsaw, Indiana

Notes on Technical Exhibits

A. S. ALOE CO., Booths No. 113 & 114

A. S. Aloe Company will exhibit a cross section of their complete line of surgical instruments, equipment and laboratory supplies. Featured will be Aloe STEELINE furniture with which thousands of physicians have equipped themselves in the past several years. In addition, don't fail to check on the selection of government surplus items which will be shown at the Aloe booths. In attendance at the exhibit will be Lewis Frazin, Chicago District Manager, and T. H. Greenwell, Central Illinois representative.

THE AMES COMPANY, Booths No. 19 & 20

Demonstrating new technics for qualitative detection of urine-sugar and albumin.

The Clinitest tablet method for detection of urine-sugar is a simple, reliable test for use by the diabetic patient and in the laboratory — the tablet reagent develops its own heat inside the test tube, eliminating the need for burners or other equipment.

The new Ames Albumintest tablet for urine-albumin gives the physician, technician and public health worker a reliable nonpoisonous, noncorrosive reagent tablet and does not require the use of heat.

AMERICAN HOSPITAL SUPPLY CORPORATION Booth No. 80

Baxter Intravenous Solutions and equipment for collection and transfusion of whole blood, solutions in the famous Baxter Vacoliters, Plasma and serum preparation and infusion equipment, and transfusion equipment such as TransfusoVacs, Plasma-Vacs, and Centri-Vacs will be features of the American Hospital Supply Corporation's booth. A trained staff will be in attendance to explain the newest in equipment and to answer all questions.

Also on display will be many special items of importance to better hospital routine and service.

THE ARMOUR LABORATORIES, Booths No. 78 & 79

The Armour Laboratories cordially invites members of the Illinois State Medical Society to visit the Armour display booths. The new Armour Atlas of Hematology is available to physicians on request. Also our books entitled "The Thyroid Gland and Clinical Application of Medicinal Thyroid" and "The Pituitary Gland" are available to those members who have not as yet received their copies. Representatives in attendance will welcome inquiries on products in the field of Endocrinology.

AYERST, McKENNA & HARRISON, Ltd., Booth No. 93

'Premarin', a highly potent, naturally-occurring complex of conjugated estrogens, will be featured.

'Premarin' constitutes a recent advance in endocrine research, resulting from the collaboration of Dr. J. B. Collip, Director of Research Institute of Endocrinology, McGill University, with our laboratories, and is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

We shall also display two new pertussis preparations, one for prophylaxis and the other for treatment of the active stages of whooping cough. These are based on the principle that the endotoxin of the H. pertussis organism is important in the etiology of the disease.

BILHUBER-KNOLL CORPORATION, Booth No. 98

Inspect our fine medicinal chemicals. The useful products: Bromural — sedative and mild hypnotic; Dilaudid — analgesic and cough sedative; Metrazol — stimulant and restorative; Octin — antispasmodic in ureteral and like spasms; Theocalcin and Phyllicin — diuretic and myocardial stimulants are on display. Prescribe them alone or in combination with other drugs as the needs of the individual patient may require. Mr. Art Murbach and Mr. Basil Kidwell will be glad to acquaint you with the latest developments on these everyday prescription chemicals.

ERNST BISCHOFF COMPANY, Booth No. 71

Our display used at your convention depicts the following products of our manufacture: ANAYODIN, LOBELIN, DIATUSSIN, SAS-PAR, and AMINET. There are pictures taken from our literature and motion pictures on each of these items.

THE BORDEN COMPANY, Booth No. 81

Come and spend a few minutes with Borden . . . . . refresh your memory on our Prescription Products. Meet the new concentrated Biolac, New Improved Dryco with its formula flexibility, Mull-Soy for your milk allergic patients, powdered whole milk Klim, the improved milk sugar Beta Lactose, and the Merrell-Soule Protein and Lactic Acid Milks. Borden men are pleasant men!

BROOKS APPLIANCE COMPANY, Booth No. 64

Watch for the revolutionary treatment of DECONGESTION with the combination pressure bandage (Contura plus Pressoplast), to be exhibited at our booth.

THE BURDICK CORPORATION, Booth No. 110

The Burdick Corporation of Milton, Wisconsin, manufacturers of Physical Medicine equipment, will exhibit their

complete line including Ultraviolet and Infra-Red Lamps, Short Wave Diathermy and Low Voltage Equipment. A feature of special interest will be the Rhythmic Constrictor, a device for the treatment of peripheral vascular conditions. Physicians are invited to stop at the booth for a free copy of Burdick's new booklet on physical medicine.

BURROUGHS WELLCOME & CO., Booth No. 69

Burroughs Wellcome & Co., New York, cordially invite physicians to their exhibit of a representative group of fine pharmaceuticals and chemicals. Of particular interest are GLOBIN INSULIN, a new advance in diabetic control; DIGOXIN, a pure, stable, crystalline gylcoside of Digitalis lanata, combining constant, uniform potency with rapidity of action; and 'DEXIN' High Dextrin Carbohydrate, the milk modifier in which the non-fermentable portion predominates.

CAMBRIDGE INSTRUMENT COMPANY, INC. Booth No. 10

The Cambridge Instrument Company of New York will exhibit Cardiac Diagnostic Instruments, including the well known Cambridge Simpli-Trol Portable Electrocardiograph which operates from the electric light supply current; also Stethographs and Pulse Recording Instruments.

CAMEL CIGARETTES, Booths No. 90 & 91

CAMEL Cigarettes will exhibit large detailed photographs of equipment used in comparative tests of the five largest-selling brands of cigarettes. Dramatic visualization of nicotine absorption in the human respiratory tract from cigarette smoke will be demonstrated. International News with CAMEL Cigarette Trans-Lux "Flash Bulletins", may be seen while enjoying a supply of slow-burning CAMEL Cigarettes.

CAMERON SURGICAL SPECIALTY COMPANY Booth No. 54

All Cameron Surgical Units immediately available and on display. See the new Cameron Coagulo-Sigmoidoscope, Electro Diagnostosets, Bronchoscopes, Esophagoscopes, Laryngoscopes, Mirrolite, Binocular Prism Loupe, Magniscope and other specialties developed for your postwar diagnosis, treatment and surgery.

CARNATION COMPANY, Booth No. 85

You are invited to visit the Carnation Company booth where you will see an attractive display presenting some interesting information on the various uses of Carnation Vitamin D Evaporated Milk for infant feeding, child feeding, and general diet purposes. The method by which Carnation Milk is generously fortified with Vitamin D — 400 U.S.P. Units per reconstituted quart — will be explained. Valuable literature will also be available for distribution.

CHICAGO PHARMACAL COMPANY, Booth No. 107

Our exhibit will feature the fact that the Chicago Pharmacal Company possesses a **complete** line of all pharmaceuticals and has done business with physicians in Illinois since 1900. A few specialties will also be prominently displayed.

CIBA PHARMACEUTICAL PRODUCTS, INC. Booth No. 76

Ciba invites all physicians to visit its display. Among the products exhibited will be PRIVINE, the potent prolonged acting nasal vasoconstrictor; PERANDREN, METANDREN Tablets and METANDREN Linguets, the most potent androgenic hormones; TRASENTINE, a well tolerated antispasmodic with ability to abolish various spasticities of the hollow viscera and TRASENTINE-PHENOBARBITAL, a combination of TRASENTINE with the well-known sedative Phenobarbital.

Samples and literature will be available and representatives in attendance to answer your questions.

THE COCA COLA COMPANY, Booths No. 21 & 22

Coca-Cola will be served to those in attendance at the 1946 annual meeting of the Illinois State Medical Society with the compliments of the Coca-Cola Bottling Company of Chicago and the Coca-Cola Company.

F. A. DAVIS COMPANY, Booth No. 74

News books and new editions will be found at the F. A. Davis booth. "The Cyclopedia of Medicine, Surgery and Specialties" — complete, authoritative; "Clinical Radiology", Pillmore; "Clinical Neurology", Alpers; "The Face in Health and Disease", Thorek; "Clinical Urology", McCrea; "Surgery of the Spinal Column", Albee; "Clinical Cystoscopy", McCrea; "Medical Diagnosis and Symptomatology", Loewenberg; "Treatment in General Medicine", Reimann; "Cardiovascular Disease", Stroud; "Therapeutics of Infancy and Childhood", Litchfield & Dembo; "Clinical Tuberculosis", Goldberg; "Diseases of Ear, Nose & Throat", Lederer; "Acute Medical Conditions", Murphy.

THE DeVILBISS COMPANY, Booth No. 14

Modern instruments for spray application, oral inhalation, powder insufflation, local application, and steam inhalation will be on display at the DeVilbiss exhibit.

A pocket size booklet containing information to assist physicians in recommending the proper atomizer for applying the prescribed pharmaceuticals will be available at the exhibit.

It is a quick reference chart for selecting non-corrosive atomizers for applying any solution; adjustable tip atomizers for reaching deep seated areas in the nose and throat; nebulizers for oral inhalation of Penicillin, 1:100 Epinephrine and other water, oil or glycerine base solutions; powder blower for insufflation of any medicated powder; an atomizer for spraying body surfaces; and a steam vaporizer for inhalation of medicated vapor.

Mr. L. H. Smock, in charge of the exhibit, will welcome the opportunity to demonstrate and explain the outstanding features of the DeVilbiss line.

DOAK COMPANY, INC., Booth No. 57

Dermatological preparations have been our specialty for twenty years.

Experience is the biggest factor in any business that well assures the physician dependable preparations for clinical use.

THE DOHO CHEMICAL CORPORATION, Booth No. 63

ELECTRO-PHYSICAL LABORATORIES, INC. Booth No. 109

The CARDIOTRON, a portable direct-writing electrocardiograph, affords new convenience in cardiology combined with the highest degree of scientific accuracy. Without the necessity of processing or developing, the minutest heart action is precisely and permanently recorded the instant it occurs on standard graph paper which is unaffected by heat or the roughest handling. In compact form, measuring only 15 x 11 x 9" with a total weight of 34 pounds, the CARDIOTRON will produce perfect electrocardiograms in any location — in the hospital, office or home.

ELI LILLY AND COMPANY, Booth No. 70

The Lilly exhibit will feature an interesting demonstration in miniature on penicillin culture. Many Lilly products will be on display, and attending Lilly medical service representatives will be present to assist visiting physicians in every possible way.

C. B. FLEET COMPANY, Booth No. 9

What may you, as a physician, expect from this stable non-toxic concentrate of the two U.S.P. sodium phosphate?

1. Accurate dosage, regulated to the patient and to his condition.
2. The maximum therapeutic effectiveness of sodium phosphate.
3. Quick, gripeless evacuation, for emergencies.
4. Mild, controllable elimination, for chronic biliary disturbances and mild constipation.
5. Unusual freedom from after-irritation, with normalizing buffer action.
6. Safe action in the therapy of tropical diseases.

Are you getting the full value of medication in your daily problems of elimination?

FLINT, EATON & COMPANY, Booth No. 105

Really palatable Effervescent Calcium Gluconate, and ingeniously convenient Insufflator Tubes of Sulfa drugs for topical treatment of open wounds, are pictorialized so "he who runs may read".

FREEMAN X-RAY COMPANY, Booth No. 15

Freeman X-Ray Company, exclusive distributors of Mattern X-Ray Apparatus, will display the Mattern combination radiographic and fluoroscopic 100-100 tilt table X-Ray unit with the deluxe automatic control. This control will be of particular interest because of its automatic features permitting the operator to get exact settings with the same ease as operating a push button radio. Information on the many other models built by Mattern will be available — Portables to 200 MA, 140 PKV units.

GENERAL ELECTRIC X-RAY CORPORATION Booths No. 12 & 13

Branches in 35 principal cities. Manufacturers of a complete line of DENTAL, MEDICAL RADIOGRAPHIC and FLUOROSCOPIC EQUIPMENT ranging from a compact, shock-proof portable unit to a shock-proof 2,000 Kvp INDUSTRIAL UNIT: COOLIDGE X-RAY TUBES: PHOTOROENTGEN APPARATUS for MASS CHEST SURVEYS: a full line of ELECTROMEDICAL APPARATUS. SUPPLIES and ACCESSORIES for X-RAY and PHYSICAL THERAPY INSTALLATIONS stocked in our 35 BRANCHES.

GERBER PRODUCTS COMPANY, Booth No. 62

Variety in baby cereals seems to offer definite advantages in sustaining baby's interest in these blandly flavored foods. Gerber's **two** cereals, Cereal Food and Strained Oatmeal, provide an opportunity for change. Both are enriched to supply liberal intakes of members of the B-complex and iron.

We invite your inspection of the literature, both professional and consumer, and of the line of canned strained and chopped foods.

H. J. HEINZ COMPANY, Booth No. 23

H. J. Heinz Company is displaying and sampling their Strained Foods for infants and Junior Foods, especially designed for intermediate feeding. Their representatives would appreciate your recommendations regarding these foods.

They are presenting a new publication, **The Nutritive Value of Vegetables.** Examine, then register for it. A reminder — if desired, also register for the 11th edition **Nutritional Charts, Nutritional Observatory, Special Dietary Foods Book,** and an office supply of **Your Baby's Diary and Calendar.**

HOFFMANN-LA ROCHE, INC., Booth No. 58

Pharmaceutical prescription specialties of rare quality produced at Roche Park, where vitamins are made by the ton, will be exhibited. The medical profession's interest in PER-OS-CILLIN, the new stable oral Penicillin; the versatile parasympathetic stimulant Prostigmin; and other scientific accomplishments will be satisfied by Hoffman-La Roche representatives who will be in attendance to discuss clinical problems.

HOSPITAL LIQUIDS, INC., Booth No. 61

Hospital Liquids Inc. will show its line of Filtrair Solutions, the Filtrair Compliter, the Filtrair Clyset and Filtrair Haemovacs, embodying the latest improvements in parenteral solution and blood transfusion therapy.

THE HYGEIA NURSING BOTTLE COMPANY Booth No. 5

At our exhibit we plan to have a nice display of Hygeia Nursing Bottles, also a series of pictures describing their use. In addition we will have a colored movie showing Hygeia in actual use and explaining the advantages which we claim for our product.

Our booth will be attended by Mr. and Mrs. Charles H. Clark, who have had many years' experience in calling on doctors and mothers all over the country.

JONES METABOLISM EQUIPMENT COMPANY Booth No. 108

The Jones Waterless MOTOR-BASAL Metabolism Unit records the Basal Metabolic Rate by measuring the time needed for consumption of a pre-determined quantity of oxygen, which is automatically corrected by the unit for barometric and temperature changes, and automatically comparing this obtained result with accepted normal values. Portable, waterless, motor-driven, frictionless, easily-operated and with tedious compensations, corrections and calculations eliminated, the Waterless MOTOR-BASAL guarantees accuracy within 1%.

THE KELLEY-KOETT MFG. CO., INC., Booth No. 65

On display at the Keleket Booth is the new Keleket Mobile-Portable Unit. This combination gives you many of the advantages found in the more expensive, full-scale equipment. It provides a complete range of positions, both vertical and horizontal, for either radiography or fluoroscopy.

Also featured at the Keleket booth is the Keleket KY Mobile Unit. Physicians have long recognized the KY as versatile complement to larger apparatus; and, in cases where space is limited or other equipment unavailable, as an effective all purpose unit offering complete radiographic coverage. Its easy mobility allows it to be used with any professional table in the office.

Come in and see us at any time during the Exhibit. We will be glad to demonstrate these fine units to you.

LEA & FEBIGER, Booth No. 60

Lea & Febiger will exhibit among their new works, Soffer on the Adrenal Glands; Stone and Dufault's "Diagnosis and Treatment of Pulmonary Tuberculosis"; Bell on Renal Diseases; Quiring's "The Extremities"; Olkon's "Essentials of Neuropsychiatry"; Burch and Winsor's "Primer of Electrocardiography".

New editions will be shown of Levinson and MacFate's "Clinical Laboratory Diagnosis"; Katz's "Electrocardiography"; MacKee's "X-Rays and Radium"; Wesson's "Urological Roentgenology"; Kovacs' "Electrotherapy"; Kuntz's "Autonomic Nervous System" and "Textbook of Neuroanatomy"; Clement's "Nitrous Oxide-oxygen Anesthesia"; Craig and Faust's "Clinical Parasitology"; Ivy and Curtis on Fractures of the Jaws — and other standard works

LEDERLE LABORATORIES, Booth No. 86

The Lederle exhibit will feature the newly released antithyroid substance DERACIL (Lederle brand of Thiouracil), together with recent advances in Penicillin therapy and other biological and pharmaceuticals in the line.

We would like to extend to the physicians who have been in service a special welcome and an invitation to avail themselves of any literature or information our representatives at the booth or our Professional Service Department may be able to render.

LIBBY, McNEILL & LIBBY, Booth No. 87

Libby's strained and homogenized baby foods are featured at the Libby booth. Physicians are invited to stop and discuss new findings on the greater availability of iron and ease of digestion of Libby's Council Accepted foods for babies.

J. B. LIPPINCOTT COMPANY, Booth No. 95

Presenting a complete list of Lippincott Selected Professional Books, including the New (2nd) Edition of Geschickter's "Diseases of the Breast". New books of significant interest include Bancroft and Murray's "Surgical Treatment of the Motor-Skeletal system; Thomas and Haddan's "Amputation Prosthesis"; Groff and Houtz's "Manual of Diagnosis and Management of Peripheral Nerve Injuries"; Foot's "Pathology in Surgery"; Wolf's "The Physician's Business". Advance information on many other new books and new editions in active preparation.

M & R DIETETIC LABORATORIES, INC., Booth No. 84

M & R Dietetic Laboratories will display Similac, a food for infants deprived either partially or entirely of breast milk. Messrs. E. M. Stevens and A. E. Boodel will appreciate the opportunity to discuss the merit and suggested application for both the normal and special feeding cases.

MEAD JOHNSON & COMPANY, Booths No. 55 & 56

"Servamus Fidem" means — We are Keeping the Faith. Almost every physician thinks of Mead Johnson & Company as the maker of Dextri-Maltose, Pablum, Oleum Percomorphum, and other infant diet materials — including the new precooked oatmeal cereal, Pabena. But not all physicians are aware of the many helpful services this progressive Company offers physicians. A visit to our booth will be time well spent.

MEDICAL ARTS SUPPLY COMPANY, Booth No. 75

We shall feature at our booth Hamilton examining furniture, Pelton sterilizers, autoclaves and operating lights; Birtcher physio therapy apparatus; surgical instruments of all types, diagnostic instruments and sundry goods.

MEDICAL FILM GUILD, Booths No. 6, 7 & 8

Medical Film Guild through their MEDICAL FILMS THAT TEACH, presents a refresher course in fundamental medical problems. This program, during the war period, kept the military medical man abreast of modern civilian practice. The new subjects reorient the military doctor to civilian procedures.

These films each representing several years of research, are condensed into half hour productions, each acting as a visual textbook. They review such subjects as Parkinson's disease, the major neuralgias, cervicitis, otolaryngological diseases, contagious diseases, arterial blood pressure, hypothyroidism and industrial medicine.

These are available to medical societies, medical schools and hospitals and include projection service, at no charge, through grants for post graduate instruction.

THE MEDICAL PROTECTIVE COMPANY Booths No. 111 & 112

The Medical Protective Company is represented at Booth 111 where you are invited to call. Medical Protective Service is an institution of the Medical profession whose legal liability problems we have concentrated upon for forty-seven years. Bring us your professional liability questions and problems. Our representative is at your service to present our Protection plan, to explain the peculiar relation of the doctor to the law which governs your practice or discuss any particular phase of Professional Liability in which you are especially interested.

THE MELLIN'S FOOD COMPANY, Booth No. 68

That you may be fully informed regarding the wide usefulness of Mellin's Food, you are invited to meet our representatives who will present for your consideration, details of composition of Mellin's Food and its application in preparing nourishment for infants, children and adults.

THE MENNEN COMPANY

The Mennen Company will exhibit their two baby products — Mennen Antiseptic Baby Oil and Antiseptic Baby Powder, in addition to their fungicidal foot powder —

Quinsana.
The Antiseptic Oil is now being used routinely in the majority of hospitals that are important in maternity work.

THE WILLIAM S. MERRELL COMPANY, Booth No. 18

Among the more recent products of Merrell Research to be featured at this exhibit will be the potentiated sulfonamide cream, Sulfa-Ceepryn, the better-tolerated synthetic estrogen, Hexestrol, and the "complete treatment" group of Ceepryn Vaginal Products. Members and guests of the Society are cordially invited to visit the Merrell exhibit.

THE C. V. MOSBY COMPANY, Booth No. 92

The C. V. Mosby Company extends an invitation to all visitors to the Illinois State Medical Society meeting to examine its new publications. Among the new books and new editions to be displayed are the following: Sadler "Modern Psychiatry"; Thewlis "Care of the Aged"; Main "Synopsis of Physiology"; Crossen "Synopsis of Gynecology"; Clark "Facial and Body Prothesis"; Dodson "Synopsis of Genitourinary Diseases"; Harcy "Synopsis of Diagnosis of Surgical Diseases of the Abdomen"; Karnosh-Zucker "Handbook of Psychiatry"; Key and Conwell "Fractures, Dislocations and Sprains"; Kleiner "Human Biochemistry"; McCormick "Pathology of Labor"; Sachs "Care of the Neurosurgical Patient"; and Titus "Management of Obstetric Difficulties".

V. MUELLER & COMPANY, Booth No. 1

A representative selection of instruments and equipment for Eye, Ear, Nose and Throat, Orthopedic, Urological and general surgery will be displayed in the Mueller Exhibit. The latest in modern medical furniture will also be shown.

ORTHO PHARMACEUTICAL CORP., Booth No. 17

Ortho will exhibit their Council Accepted well-known products for the control of conception — Ortho-Gynol, Ortho-Creme, Ortho Diaphragm Introducers.
Ortho will also exhibit other gynecic pharmaceuticals — Nutri-sal, for selected cases of infertility; Hexital, for treatment of the Menopause; Hexestrol, for all cases where estrogenic therapy is indicated; Aci-jel, for treatment of vaginal infections; and Triple Sulfa, for treatment of bacterial vaginal infections.

PARKE, DAVIS & COMPANY, Booth No. 115

Representatives of PARKE, DAVIS & CO., well informed concerning progress in Pharmaceutical Research, and desirous of presenting new advancements to you, will be in attendance at our Technical Exhibit to discuss the nature and employment of new and present products.
Displayed will be such outstanding products as THEELIN, MAPHARSEN, and ADRENALIN PREPARATIONS. The latest type of Biological Products will be on display, including our exclusive DESPECIATED ANTITOXINS. Also, PENICILLIN and other therapeutic agents of antibiotic, biological, and chemotherapeutic interest will be shown.
We sincerely invite your visit to this Exhibit.

THE E. L. PATCH COMPANY, Booth No. 104

The E. L. Patch Company exhibit will feature original Patch medicinal specialties, including Gadoment, the first real cod liver oil ointment for local application; Thiasulfamix, combining Sulfanilamide and Sulfathiazole for treatment of local infections; Secremol, the cough preparation with a wetting agent; and Kondremul, the Irish Moss-Mineral Oil Emulsion. The Patch men will be glad to greet you.

THE PET MILK SALES CORPORATION
Booths No. 96 & 97

A complete display of material illustrating the time-saving Pet Milk services available to physicians. Specially trained representatives will be in attendance to give you information about the production of Pet Milk and its use for infant feeding. Miniature cans will be given to physicians visiting the exhibit.

PHILIP MORRIS & COMPANY, Booth No. 103

Philip Morris & Company will demonstrate the method by which it was found that Philip Morris Cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject, and problems on the physiological effects of smoking.

PICKER X-RAY CORPORATION, Booths No. 2 & 3

Picker X-Ray Corporation is showing several diagnostic x-ray units providing facilities for fluoroscopy and radiography in all positions from the Trendelenberg to the Vertical. The 'Minograph', a mass x-ray survey unit using 70 mm roll film, will also be demonstrated. In addition to these, a selection of radiographic and therapy accessories will be shown.

POLORIS COMPANY, INC.

The Poloris Company's exhibit will feature an interesting display of the medicinal ingredients contained in Poloris Dental Poultice.
The display has been designed to acquaint the members of the medical profession with the purpose of Poloris Dental Poultice, namely, local medicinal counterirritation, inflammation or congestion of the teeth and gums.
Professional samples will be available.

W. B. SAUNDERS COMPANY, Booth No. 100

This publishing house will exhibit its complete line of books, including Bockus' 3 volume work on "Gastro-enterology", new (5th) edition of Beckman's "Treatment", new (4th) edition of Christopher's "General Surgery", Ash & Spitz' "Atlas of Pathology of Tropical Medicine", Jackson & Jackson's "Diseases of the Nose, Throat and Ear", new (4th) edition of Mitchell & Nelson's "Pediatrics", Jones & Shepard's "Manual of Surgical Anatomy", Moorhead's "Clinical Traumatic Surgery", Herrell's "Penicillin and Streptomycin", Wohl's "Dietotherapy", Haymaker & Woodhall's "Peripheral Nerve Injuries", "Manual of Tropical Medicine", new (3rd) edition of Levine's "Clinical Heart Disease", "Manual of Mycology", new (3rd) edition of Stokes, Beerman & Ingraham's "Syphilology", Orr's "Operations of General Surgery", Pullen's "Medical Diagnosis", Cantarow & Trumper's "Clinical Biochemistry", new Howell-Fulton's "Physiology", Allen, Barker & Hines' "Peripheral Vascular Diseases", new (2nd) edition of Mason's "Pre- and Postoperative Care", new (2nd) edition of Graybiel & White's "Electrocardiograph", and many others.

SCHERING CORPORATION, Booth No. 72

Presented are the purest and most potent hormones available, products which have set the standard in modern endocrine therapeutics. Selected specific chemotherapeutic agents and the products which are effective as diagnostic roentgenographic and cholecystographic substances are displayed. The result of major scientific research and based upon objective clinical observations, products of Schering Corporation, Bloomfield, New Jersey, are displayed together with charts and graphic material designed to assist the practicing physician.

G. D. SEARLE & COMPANY, Booth No. 101

You are cordially invited to visit the Searle booth where representatives will be happy to answer questions pertaining to Searle Products of Research. Featured will be Searle Aminophyllin, Metamucil, Ketochol, Floraquin, Diodoquin, Pavatrine, Tetrathione, and Gonadophysin.

SHARP & DOHME, INC., Booth No. 82

Sharp & Dohme will have their display featuring Tyrothricin Concentrate for Human Use, 'Lyovac' Normal Human Plasma, 'Sulfasuxidine', and 'Caligesic' Ointment, a greaseless anesthetic and analgesic ointment which possesses definite anti-pruritic action. A cordial welcome awaits all visitors.

SMITH, KLINE & FRENCH LABORATORIES
Booths No. 88 & 89

Our specially trained professional representatives will be glad to answer questions concerning the possible uses of our products in your practice.
BENZEDRINE SULFATE TABLETS, N.N.R. and DEXEDRINE SULFATE TABLETS: Since its introduction some ten years ago, Benzedrine Sulfate, N. N. R. (racemic amphetamine sulfate) has grown steadily in clinical usefulness and today occupies a unique place in routine medical practice.
For certain selected cases, however, it is often desirable to employ a drug combining an even more preponderant central nervous stimulation with a relatively weaker peripheral effect. A closely related compound — Dexedrine Sulfate (dextro-amphetamine sulfate) — precisely fulfills these requirements.

SPENCER, INCORPORATED, Booth No. 4

You are cordially invited to visit our exhibit, featuring Spencer Individually Designed Supports for abdomen, back, and breasts. You will be especially interested in these supports for patients who have undergone mastectomy.
You will also be interested in the Spencer Spinal Support for patients following cast removal or, as an aid to treatment of protruding disc, and other back derangements.
Supports for patients with hernia, visceroptosis with symptoms, postoperative needs, obesity, antepartum and postpartum needs are also on display.

E. R. SQUIBB & SONS, Booth No. 72

A technical exhibit intended to further the conservation and more effective use of Penicillin.

STANDARD X-RAY COMPANY, Booth No. 94

The Standard X-Ray Company will exhibit x-ray apparatus of modern design especially suited for office use. Those interested are invited to visit our factory, located on the near north side of Chicago. Arrangements can be made with the representatives in attendance in our booth.

FREDERICK STEARNS & COMPANY DIVISION
Booth No. 102

You are cordially invited to visit the exhibit of Frederick Stearns & Company Division. Members of our professional staff will be in attendance to discuss these distinctive professional specialties developed in the Stearns Research Laboratories:

Neo-Synephrine Hydrochloride — sympathomimetic drug for intranasal, ophthalmic and parenteral use;

Parenamine — a solution of amino acids, used in the prophylaxis and therapy of protein deficiency;

Adnephrin — for symptomatic relief of bronchial asthma;

Fergon — a better tolerated, better utilized iron salt; also, the Fairchild enzyme products now manufactured solely by Frederick Stearns & Company Division under the original Fairchild processes — **Pepsencia, Gastron** and **Holadin.**

SUTLIFF & CASE CO., INC., Booth No. 99

Make our booth headquarters. Our representative from your territory will be on hand to welcome you and make you feel at home.

On display you will find Blexicon, a liquid B-Complex preparation providing high unitage of the B-Complex plus the natural factors found in Rice Bran Extract. Contains neither alcohol nor sugar, making it ideal for children and diabetics. Also, five of our Thiocyanate Preparations for the treatment of arterial hypertension.

Be sure to see us. We will be looking for you.

U. S. STANDARD PRODUCTS COMPANY
Booth No. 59

A cordial invitation is extended to all attending physicians to visit the U. S. Standard Products' booth. Professional representatives will be on hand to supply you with all information on the various items displayed which will include some of the outstanding newer developments.

Featured will be Combined Pertussis, Tetanus and Diphtheria; Pertussis and Diphtheria; and straight Pertussis Vaccines in which high concentration of Pertussis reduces dosage and offers an impartant clinical advantage.

UNIVERSAL PRODUCTS CORPORATION

Universal Products Corporation of Norristown, Pennsylvania, will show Surgeon X-L-Lyte. The Physicians' Electric and Diagnostic Case. Surgeons' X-L-Lyte meets the demand for an inexpensive yet handy and compact and serviceable diagnostic set. Containing instruments usually required for making a diagnosis of cases in the course of general practice.

You will be delighted to see Surgeons' X-L-Lyte when you realize its time-saving possibilities, its convenience, and its practibility. It will become even more indispensible than your fountain pen because it is simple and easy to operate.

The Set is contained in a neat and serviceable leather case with zipper. It contains otoscope, tongue depressor, tonsil pillar retractor, magnifying lens, nasal speculum, and transillumination.

WESTWOOD PHARMACAL CORP., Booth No. 77

WESTWOOD offers the medical profession the only adequate means of providing a soap-free regimen for soap sensitive patients. LOWILA CAKE for skin cleansing and LOWILA LIQUID for household cleaning, eliminating the otherwise necessary dependence on soap for cleanliness by such patients.

WESTWOOD also exhibits a new jelly for effective treatment in vaginitis and cervicitis — WESTHIAZOLE VAGINAL. This is an acid polyethylene glycol jelly containing 10% sulfathiazole in solution. Packaged in single-dose, disposable paper applicators, it offers a convenient dainty method for applications at home by the patient, and in the office by the physician.

WHITE LABORATORIES, INC., Booth No. 83

White Laboratories, Inc. present information regarding White's Sulfathiazole Gum — expressly formulated for topical chemotherapy in oropharyngeal infections; White's Otomide — a more effective means of topical chemotherapy in ear infections — and a NEW special White's Mol-Iron Tablets, a new and definite advance in the treatment of iron deficiency anemias.

White's ethically promoted vitamin specialties are also featured. You will find a very cordial welcome by White's Medical Service representatives in charge of the exhibit.

WINTHROP CHEMICAL COMPANY, INC.
Booth No. 68

Winthrop Chemical Company, Inc., New York, has available a number of interesting and highly informative booklets. Ask particularly for your copy of Demerol, new analgesic, spasmolytic and sedative, and Creamalin, nonalkaline antiacid.

ZIMMER MANUFACTURING COMPANY, Booth No. 16

The Zimmer Manufacturing Company is showing selected items from their complete line of fracture equipment. Among the new instruments shown are the first two-speed surgical hand drill, a revolutionary set of bone clamps and a new type of screw driver. In fact, practically all of the new developments in fracture equipment of the past few years will be on display.

★ You'll Enjoy

The Annual Dinner

and

Dr. William M. McGovern

world traveler, author and

popular speaker.

May 15th

Grand Ballroom, Palmer House

Correspondence

REFRESHER COURSES AT UNIVERSITY OF ILLINOIS

A one week didactic and clinical refresher course in otolaryngology has been arranged for specialists in the field, from May 13th to 18th, 1946, inclusive. Applications for registration should include school of graduation, training and experience. Check for tuition ($50.00) should accompany the application.

In addition, a special course in bronchoesophagology will be given from June 3rd to 15th, 1946, inclusive. It will consist of lectures, animal and cadaver demonstrations, diagnostic and surgical clinics.

The course will be under the direction of Drs. Paul H. Holinger and Albert H. Andrews, Jr.

Tuition for this course is $100.00. Check should accompany application. Class limited to twelve physicians.

For further information address:

Department of Otolaryngology
University of Illinois College of Medicine
1853 West Polk Street
Chicago, Illinois

PLANS ANNOUNCED FOR 1946 CLINICAL CONGRESS OF AMERICAN COLLEGE OF SURGEONS IN NEW YORK

The American College of Surgeons announces that arrangements have been completed for the holding of its Thirty-second Clinical Congress at the Waldorf-Astoria, New York, September 9 to 13 inclusive. Plans include the usual extensive program of demonstrations, scientific sessions, panel discussions, symposia, forums, Hospital Standardization Conference, medical motion pictures, business meetings, and educational and technical exhibits, which will be held in the headquarters hotel, and operative and non-operative clinics in the local hospitals.

This will be the first Clinical Congress since the meeting in Boston in 1941. Since that time, 2,744 surgeons have been received into fellowship in absentia, and to them in particular the Convocation on the opening night of the Congress will be a long anticipated event. Many of these new Fellows will have recently returned from service with the armed forces. The formal initiation ceremonies, always impressive, will be exceptionally so this year because of the large number of new Fellows admitted during the past four years who are expected to be present.

Officers, Regents, and Governors have remained in office since 1941 because of the cancellation of annual meetings of the Fellows. Especial interest will also therefore be attached to the installation of the officers-elect, headed by Dr. Irvin Abell, Chairman of the Board of Regents, as President. Dr. W. Edward Gallie of Toronto has been President since November, 1941. Dr. Gallie will give the Presidential Address at the Presidential Meeting and Convocation on the evening of September 9 in the Grand Ballroom of the Waldorf-Astoria.

Dr. Howard A. Patterson and Dr. Frank Glenn of New York City are Chairman and Secretary respectively of the Committee on Local Arrangements. Dr. Henry Cave of New York, a member of the Board of Regents of

the College, is also active in directing the local plans for the meeting, attendance at which is usually around five thousand surgeons and hospital representatives.

UNITED STATES CHAPTER, INTERNATIONAL COLLEGE OF SURGEONS, MEETS IN DETROIT

The International College of Surgeons, United States Chapter, will hold its Eleventh Annual Assembly and Convocation in Detroit, Monday, Tuesday, Wednesday, October 21-22-23, 1946.

Surgical clinics in Detroit hospitals will feature the first morning of the Assembly. Thereafter all the meetings, the Convocation, and the Exhibition will be held in the Masonic Temple, a splendid building affording every convience. The Detroit Statler and the Book-Cadillac will be hotel headquarters.

Officers of the International College of Surgeons, United States Chapter, include President Herbert Acuff, M.D. of Knoxville, Tennessee; President-Elect Custis Lee Hall, M.D. of Washington, D.C.; and Louis J. Gariepy, M.D. of Detroit, Executive Secretary.

Dr. Gariepy, General Chairman of Arrangements for the Detroit Assembly advises that satisfactory housing accomodations for the 1946 Assembly have been assured through the Detroit Convention & Tourist Bureau. Copy of Program and detailed infomation may be obtained by writing Dr. Gariepy at 16401 Grand River Avenue, Detroit.

SUGAR AND TREATMENT OF DISEASE

In view of the present sugar shortage existing in the United States, practicing physicians throughout the country may be interested in what the Subcommittee on Medical Food Requirements of the National Research Council in Washington, D. C. thinks of the use of sugar for the treatment of diseases.

This subcommittee serves in an advisory capacity to the Office of Price Administration in its consideration of cases submitted to it by individuals appealing from decisions of its field offices in applications requesting sugar in addition to the regular allotment, alleged to be necessary because of illness.

The following represents the considered judgment of the subcommittee on Medical Food Requirements:

"Additional rationed sugar, beyond the 15 pounds per capita per year now allocated under current rationing regulations, is not essential in the treatment of any disease, because unrationed sources of carbohydrate, including syrups, preserves and processed fruits and juices, are now readily available to provide a source not only of readily assimilable carbohydrate, but also a wide range of palatable substances calculated to appeal to the palate of individuals, sick and convalescent, whose appetities have been impaired by illness."

LAWRENCE W. SMITH, M.D. MEDICAL DIRECTOR AT COMMERCIAL SOLVENTS

Lawrence W. Smith, M.D., well-known pathologist, is now associated with Commercial Solvents Corporation as Medical Director.

Previously, Dr. Smith was Professor of Pathology at Temple University School of Medicine and was Director of Laboratories at Temple University Hospital. He also worked extensively with the Lakeland Foundation on the development of therapeutic uses for chlorophyll and its derivatives in the cure of war wounds and burns.

Dr. Smith became instructor in pathology at Harvard University in 1920. In 1922 he went to the University of the Philippines at Manila as Professor of Pathology and Bacteriology. He returned to Harvard the following year as faculty instructor in pathology; he became Assistant Professor in 1926. In 1928 he joined the staff of Cornell University's Medical College, and was made Associate Professor in 1932.

TWO RESEARCH GRANTS RENEWED

Renewal of two research grants, totalling $7,200 for the support of clinical work and study in two large universities, is announced by Sharp & Dohme, Inc., Philadelphia.

A grant of $6,000 is renewed for the University of Illinois, in support of the laboratory and clinical studies of Dr. M. H. Streicher.

Announcement is made of renewal of a $1,200 grant to the Mendel Research Fund, Yale University, New Haven, Conn., in support of clinical work.

House of Delegates

HOUSE OF DELEGATES
ILLINOIS STATE MEDICAL SOCIETY
SPECIAL MEETING — JANUARY 6, 1946
Chicago, Illinois

A special meeting of the House of Delegates of the Illinois State Medical Society was held in the Hotel Sherman, Chicago, on Sunday, January 6, 1946.

The meeting was called to order at 9:26 A.M. by the President, Dr. E. P. Coleman.

THE PRESIDENT: The first order of business is the report of the Credentials Committee.

DR. E. S. HAMILTON: The Credentials Committee has certified 42 delegates from downstate, 47 from the Chicago Medical Society and 15 members of the Council, a total of 104. I move that this constitute the voting strength of this body for this meeting. (Motion seconded and carried).

THE PRESIDENT: I have a brief preliminary statement which I will read.

As you all know, our regular meeting in May, 1945 was cancelled on account of the war. It was then thought that we could hold a regular meeting of the House of Delegates in the late summer, but these plans were twice forbidden by the Office of Defense Transportation. It was then decided by the Council that it might be best to postpone the meeting until our regular time in May, 1946.

However, changes are occurring so rapidly and they will affect the private practice of medicine so profoundly that it is felt impossible to wait another four months before submitting to this body, problems that require your action.

The private practice of medicine is being assailed on many sides and federal control is recommended even by the President of the United States. False statements are being made, and disproven statistics are being quoted to the effect that the American people are in dire need of medical care.

You are all familiar with these statements and know they are not true. The American people are receiving the best and most efficient care in the world and it is constantly being improved. However, the threats upon our American method of medical care, as well as upon the American way of life, are so menacing that this meeting has been called to consider some of these problems, and some suggested remedies.

The two major problems are: First, the threat of governmental control of the practice of medicine. This is being put before Congress by the Wagner-Murray-Dingell Bill, and is backed by President Truman and supported very actively by the C.I.O. and other groups. Second, the problem of the medical care of returned service men and women who will constitute a group at least four times greater than those of the last war, and whose care, if left to governmental hospitals, will require nearly as many medical officers as were used by the Army.

The answer to these problems is: First, what has been done in the past; and second, what can we do now. Contrary to many opinions, the medical profession has not been asleep on the job. Twenty years ago, we were faced by a hostile press and magazine articles, planned to undermine the medical profession's position with the public. The public knew very little about our ideas and our intentions. At that time Dr. Charles Whalen, our editor, started a campaign of educating the profession itself, warning us against the dangers of Socialized Medicine which he foresaw. Following his pioneer efforts, the Illinois State Medical Society organized the Lay Educational Committee which is doing excellent work at the present time. Through the work of this committee, and by cooperating with County Societies, medical men have been addressing public meetings over the state for twenty years. Through local papers and via radio at times, the public has been given organized medidine's viewpoint. We as a State Society, have made every effort to work with, and in part, to control some of the health activities of the numerous well-intentioned lay organizations which are so numerous in the state. In consequence we have had the promise of support from a majority of the Illinois representatives in Washington. We have made many friends among other organizations which might otherwise have been antagonistic to us.

As a State Society we have more recently worked with the National Physicians' Committee with which

you are familiar. We, in Illinois, are in a relatively strong position. If all other states had done as well, we would not be faced with some of our present problems.

The American Medical Association has, after long delay, established a Public Relations Department in Washington and this is doing excellent work. They have come to the conclusion that the most effective counter measure to compulsory health insurance is voluntary health insurance. A system such as has been working successfully in Michigan, California, and a number of other states. In fact, a few counties are already starting it in Illinois.

The meeting of the House of Delegates of the American Medical Association held last month resulted in the decision that a voluntary health insurance plan, of national scope be started at once, and that all states which have not been active in this work be urged to start health insurance plans, either as State Societies or in cooperation with Blue Cross or regularly established Insurance Companies.

At the last meeting, this House of Delegates ordered a committee appointed to investigate all prepayment plans and set up a plan under which we could work. This committee has done a tremendous amount of work. It has held frequent meetings for over a year and a half. It has spent more time and effort than anyone realized would be needed. The results of these studies were such that the Committee and the Council felt that they could go no further on their own responsibility without first submitting its findings to this House of Delegates and to await whatever in your judgment seemed most suitable. If this House decides to follow the American Medical Association's House of Delegates recommendations, and as a result inaugurates a prepayment care plan, it will then have the responsibility of carrying back home, to the rest of the profession, the decisions reached here today and should be willing to help start locally any plan decided upon here. Without medical cooperation no insurance plan can succeed and without some such plan a Federal plan will almost certainly be enacted.

The second problem to be considered here is the medical care of the disabled veteran. General Paul R. Hawley, Chief Medical Officer of the Veterans' Administration, has a plan by which part of that care may be rendered by the doctor of the veteran's own choice and in his home community. A plan is to be submitted to you here for whatever action you deem advisable. It is the first time a government agency has come to the profession with a suggestion that actually decentralizes a bureau.

THE PRESIDENT: I will now call upon Dr. Hopkins, the Chairman of the Council, to tell you why we are having this meeting.

DR. PERCY E. HOPKINS: As you recall at the meeting of the House of Delegates in 1944, a motion was made, seconded and finally amended, that the Council investigate the various Prepayment Plans for Medical, Surgical and Hospital Care. There have been in existence for many years, many plans for hospital care, several of which have been in operation in the State of Illinois. This Committee which was appointed by the Council and of which Dr. Charles H. Phifer is Chairman, has spent a great many days and nights in consulting various individuals and organizations which might be interested in such a project. The colored people have been consulted, industry has been consulted, almost every group of which one could conceive has been consulted. The Council finally, after the Committee was ready to report, gave the Committee its full recommendation of the Plan that it is to propose to you this morning but the Council felt, as did the Committee, that this matter was of sufficient importance to call a special meeting of the House of Delegates. That is the reason you gentlemen are here. This matter is a very serious thing. It is a matter that should be done soon and it must be done now. That is the reason for calling a special meeting of the House of Delegates.

THE PRESIDENT: As Dr. Hopkins has stated, the Committee has done a tremendous amount of work on this subject. Dr. Phifer will give his presentation of the subject and will call on different members of his Committee to read short papers.

DR. E. S. HAMILTON: I would suggest that we have this an Executive Session. I therefore move that we consider this an Executive Session. (Motion seconded and carried.)

I would make a further suggestion that those members of the Staff of the Illinois State Medical Society who are working here today and any member of the Society in good standing be allowed to remain.

THE PRESIDENT: They are part of our official family and it is so-ordered.

Doctor Pond, I will ask you and Dr. Hulick to act as sergeants-at-arms, you to poll the Chicago group and Dr. Hulick to take care of the downstate members.

The House is now clear and I will turn the meeting over to Dr. Phifer.

DR. CHARLES H. PHIFER: Mr. Chairman and Members of the House of Delegates:

I would like to take a few moments before presenting this report to make a few introductory remarks in regard to this report. The study of both voluntary Prepayment Plans for Medical Care and Prepayment Plans for Hospital Service made a colossal assignment. The subject of prepayment plans for medical care is comparatively new. There have been a few isolated plans in different sections of the country for a number of years. Some of these have been operating successfully but the majority of the state medical societies and many counties have been pioneering in this field of endeavor.

The subject of prepayment plans for hospital service is one that has been in operation throughout the nation for many years. Many of these organizations have been small individual and independent groups. Many of them have been more recently organized under the head of Blue Cross Plans.

In studying this entire subject it has been necessary to do a great deal of investigating and interviewing

medical men, hospital groups, and people interested in this field, as well as many other organizations.

In presenting this report this morning, I would like to include it under the following classifications:

1. The report that appears in the Handbook of the House of Delegates.
2. The report that was presented to the Council on October 14th.
3. Exhibit of lantern slides relative to different types of plans.
4. Presentation of short concise papers by different members of the Committee relative to Prepayment Plans.
5. The final report to the Council on December 16th.
6. Slides.
7. Address by Dr. F. L. Feierabend of Kansas City Surgical, Inc.

REPORT OF THE COMMITTEE TO STUDY PREPAYMENT PLANS FOR HOSPITAL AND MEDICAL CARE:

To the Members of the House of Delegates:

Your committee begs to make the following report in reference to its study of prepayment plans for hospital and medical care.

Your committee was appointed in keeping with the action of the House of Delegates of the Illinois State Medical Society in May, 1944. At its first session Dr. Rollo K. Packard introduced the following resolution in reference to prepayment plans for hospital and medical care:

WHEREAS, there is a growing tendency on the part of the public for prepayment plans for hospital and medical care, and

WHEREAS, the American Medical Association has approved group hospitalization plans and cash indemnities for medical fees, and

WHEREAS, there is a growing demand among subscribers for hospital care that medical indemnity be included, and

WHEREAS, group hospitalization plans throughout the country are studying the feasibility of such cash indemnities subject to approval of state and county medical societies,

THEREFORE BE IT RESOLVED, That the House of Delegates of the Illinois State Medical Society approve the plan in principle and the Chairman of the Council appoint a committee to cooperate with the hospital service plans in Illinois in developing a program for the inclusion of voluntary medical indemnity benefits and this committee report to the Council of the State Society as soon as feasible and carry out such instructions as the Council may authorize for the consummation of this plan.

This resolution was referred to the Resolutions Committtee for its consideration and recommendations. It was considered by the House of Delegates at its second meeting on May 18, 1944, at which time the Resolutions Committee made its report. The resolution was discussed by different members of the House. Although the original motion considered only the question of cooperating with hospitalization plans, the discussion brought out the desirability of the proposed committee studying all types of prepayment plans for medical care, including those written by insurance companies. Dr. Packard, who introduced the resolution, concurred in the recommendation of the discussants that the study include all types of prepayment plans for medical care. The resolution was adopted empowering the Chairman of the Council to appoint a special committee to study and survey all types of prepayment plans for hospital and medical care.

In an effort to bring into the Committee a representative cross section of the membership of our Society, members were appointed representing the various fields of medicine and surgery in metropolitan and rural areas, industrial medicine, specialized fields of medicine and general practice.

In the study of this problem the Committee made a special study of all the prepayment plans for medical, surgical and hospital care in the United States, giving special consideration to Blue Cross Plans as well as the different Hospital Plans in the State of Illinois.

We devoted one entire day's conference to interviews with the medical representatives of the following neighboring states: Michigan, Indiana, Missouri, Iowa and Wisconsin. We carefully inquired into what they had done in reference to prepayment plans for medical, surgical and hospital care, the different types of plans in operation in their states, those in the process of formation, likewise their experience in reference to these plans and also regarding enabling legislation concerning prepayment plans.

We interviewed employers representing large and small industrial organizations, numerous railroad representatives, many insurance carriers, agricultural organizations, representatives of hospitals and charitable institutions. We likewise interviewed representatives of Blue Cross Plans as well as other group hospital plans and medical plans in the State of Illinois.

It is to be noted that there are different types of prepayment medical plans, among which are the medical service plan and the cash indemnity plan.

Medical service plan is a prepayment plan under the complete control of the medical profession. In this type of plan payment for medical service is made directly to the attending physician at a definite predetermined rate for service.

The cash indemnity plans differ in that a specified payment is made directly to the patient by the Plan, this money to be used by the patient toward the payment of professional services.

Hospital prepayment plans provide daily hospital expenses, such as bed, board and nursing, and special hospital charges exclusive of medical care. Some Hospital Plans operate as a cash indemnity to the patient. Others operate as a service plan with payments made to the hospital.

In the course of our study the Committee found that while the majority of medical service plans operated pursuant to enabling legislation, in some states

no such procedure was deemed necessary.

The Committee has also very carefully evaluated the trend of national legislation in regard to socialized medicine. There is beyond a question of doubt a demand for such plans by citizens of this nation.

The Committee is greatly impressed as are most physicians and medical organizations with the great strides that have been made in organizing prepayment plans throughout the nation since the last meeting of the House of Delegates of the Illinois State Medical Society in 1944. In that interim the majority of state medical societies have made a very careful study of this problem. Many have adopted some type of prepayment plan for medical and surgical care. Others have introduced enabling acts preparatory to such activities. It is the opinion of your Committee that the House of Delegates of the Illinois State Medical Society should give very special consideration to the question of adopting some type of prepayment plan for medical care during its meeting in 1945.

It is the Committee's information that the Medical Service and Public Relations Committee of the Illinois State Medical Society has given very careful consideration to the need for an enabling act to cover this type of service in the state of Illinois. Such legislation has been introduced in the State Legislature, passed, and is now a part of the laws of this state.

The Committee would like to state that it noted a desire and a tendency of Blue Cross Hospitalization Plans to expand so as to include prepayment plans for medical care. The advisability of such expansion was questioned by your Committee due to the control of most hospital service plans being outside that of the medical profession.

The Committee believes that the rapid changes that are taking place throughout the nation in reference to this problem demand its further consideration and evaluation. It is the Committee's intention to continue this study and to present to each of the members of the House of Delegates a more detailed supplementary report prior to the meeting of the House of Delegates. The Committee urges each of you to give very careful consideration to the study of this problem, familiarizing yourselves with the different types of plans and their operations and troubles. The Committee would refer you to the articles that are appearing in the current journals so that each member of the House will be familiar with this very important subject.

The question of whether to adopt a state wide plan in Illinois and what type of plan it should be, if any, is a problem for the members of the House of Delegates to decide. It is the opinion of your Committee that very serious consideration should be given to the question of adopting a cash indemnity plan.

Respectfully submitted,

Committee to Study Prepayment Plans for Hospital and Medical Care: Charles H. Phifer, M.D., Chairman; Edwin S. Hamilton, M.D.; Frank Deneen, M.D.; Robert Keeton, M.D.; Richard J. Bennett, M.D.; Joseph H. Chivers, M.D.; Charles P. Blair, M.D.; Robert S. Berghoff, M.D.; John W. Neal; Everett P. Coleman, M.D. (ex officio); Harold M. Camp, M.D. (ex officio); Percy E. Hopkins, M.D. (ex officio).

REPORT OF THE COMMITTEE FOR THE STUDY OF PREPAYMENT PLANS FOR HOSPITAL AND MEDICAL CARE FOR THE ILLINOIS STATE MEDICAL SOCIETY

TO THE COUNCIL OF THE ILLINOIS STATE MEDICAL SOCIETY:

The Committee desires to supplement the report that was presented to the Council and included in the annual report to the House of Delegates with a more detailed report at this time. (Exhibit A.) We assure you we are most anxious to present for your consideration an unbiased and constructive report of our study on this very important and comprehensive assignment. We hope you will follow it carefully and feel free to ask for any additional information on any phase of this question. The careful study and evaluation of this problem has been a very tedious, time-consuming and laborious task. It is one that differs in the individual states. It is likewise a problem that may show changes from time to time. In assuming this responsibility it was the Committee's opinion that we should first obtain some information regarding the needs of the public for a plan in this state; second, the various health programs that are in operation in this state; third, the facilities, either state or national, that are available to obtain such a plan.

This state has a population of about 8,000,000 people, distributed in many urban and rural communities, primarily a great agricultural state, however, famous for its steel, coal, meat, oil, mercantile, mining and dairy industries, to say nothing of its tens of thousands of manufacturing industries and different enterprises, some employing tens of thousands of individuals, many of whom are in the low income group. It has likewise charity hospitals and dispensary clinics, each admitted several hundred thousand annually, as well as a large number of public assistance recipients. Hospital service plans in Chicago and throughout the state each provide hospital service for thousands of people, some selling prepayment plans for medical care. Neighboring state hospital service plans invade the territory of the state of Illinois. We also had to consider the experience of other state and county medical societies that had had prepayment plans operating for years or that now had plans in the process of formation, likewise their organization, financing, operating management, also the commercial insurance carriers interested in health and accident insurance. There are many civic as well as labor organizations each interested in health programs.

The fact that we had so many diversified interests to carefully evaluate before coming to a decision regarding our recommendation on this question, prompted the Committee to inquire into these various angles of this question. We were anxious to know what industries were doing for their employees in the way of health programs, what was needed in the way of

extension of such programs, the number of people currently receiving charity assistance, the number that were ordinarily able to meet their obligations except in the case of serious or prolonged illness, what the agricultural and manufacturing interests wanted, likewise that of labor, what was offered in the way of insurance through commercial carriers and what was being done by other state and county medical societies. In view of these very important questions your Committee undertook to study this great subject by interviewing representatives of the Hospital Service Plans, the meat industry, railroads, mercantile organizations, Pullman Company, Chicago Surface Lines, the steel industry, aircraft, electrical and automotive industries, Illinois Agricultural Assocition, the Illinois Manufacturers' Association representing over 3500 organizations. We contacted the American Federation of Labor and the Congress of Industrial Organizations asking them to meet with us so that we might obtain information as to what their objectives were in a health program for this state. While their representatives promised to meet with us, they later cancelled their engagements.

We contacted representatives of the medical schools regarding their outpatient clinics, Cook County Hospital and other charity hospitals, the Negro physicians of Chicago, this being an important group since there are over 400,000 negroes in the state of Illinois, the majority of whom are in the low income bracket. We conducted a careful study of all the prepayment plans for medical care in the United States. We contacted and met with representatives of commercial insurance carriers. All of these contacts have contributed valuable information to this survey. We learned from industry something about their employees and organization of their health programs, how long they had been in operation, the number of people involved, what the program offered. Many of them finance their own health programs, many are payroll deductions, others are financed by their organizations, many are covered by commercial insurance carriers. We learned that absenteeism is a great factor to contend with among the low wage earners. The interview with the charity hospitals, dispensaries and medical schools brought to our attention the number of the people in the low income group that ordinarily pay their expenses except in case of illness, especially where it is prolonged. The Negro physicians, representing the Negro population, were of the impression that a prepayment plan for medical care might be very constructive in helping them to provide better health programs among their people. We conferred with representatives of the National Health and Accident Underwriters' Conference as well as with individual representatives of commercial insurance carriers, some of which are actively engaged in writing this type of insurance, others are pioneering and awaiting the guidance of the medical profession in drafting contracts covering this field of insurance. These contacts were valuable and offered a constructive aid in helping us to develop a program in this state.

Hospital Service Plans: We have called your attention in the past to the fact that you should not confuse the function of a hospital service plan with that of a prepayment plan for medical care. We have also stated that the House of Delegates of the American Medical Association has gone on record as insisting that hospital service plans be limited to bed, room and board and general nursing care. The hospital service plans have entered a terrific drive for subscribers during the past eighteen months. They now number over 18,000,000 contracts for hospital service in the United States. In the past year the main organization, the Blue Cross Hospital Service, has entered into the question of selling prepayment plans for medical care. The Committee appreciates the fact that hospital service and medical care in the hospital are very closely associated. The Committee, however, believes that they are two separate entities and that the hospitals and the medical profession should each operate their own plans. (Exhibit B).

Prepayment Plans for Medical Care: We had an all day conference with representatives of our neighboring states, discussing their plans. We have likewise carefully examined into and reviewed all the existing plans for medical care in the United States. (Exhibit C) We have noted particularly how they have been organized and financed, whether they have been sponsored by state or county societies, the amount of money required, how the money was provided, whether by contributions or subscriptions by physicians, industries, public benefactors, medical societies, or insurance companies, the type of medical care given, the fact that some plans have not been solvent, the careful executive management required to operate the plan, the need for a medical advisory committee to pass on medical claims, the fact that some are administered by medical societies, others jointly with Hospital Service Plans in order to save the cost of administration and operation. We present herewith this draft of prepayment plans for medical care (Exhibit D).

You will note herewith the type of coverage. This consists of medical, surgical, obstetrical, fractures or other special medical services. In commenting upon this category, I would like to state that *general medical care* has been a very difficult problem to include in these plans because it has been difficult to evaluate the cost of this kind of care rendered in the office or home. *Medical care, however, in the hospital* is included in many plans. It is the first step toward a full coverage plan. The subscriber usually pays the first three days' cost, the plan paying for the next twenty or thirty days. *Surgery and obstetrics*: Most plans offer this as a joint benefit, with the latter included only on the family contract. *Special medical service*: We are informed by the Hospital Service Plans that there is a request on the part of the people

for the inclusion of x-ray, pathology, and anesthesiology.

The manner of operation and remuneration: (A) *Service Plans for Complete Medical Care*: This prepayment plan sells a contract to the subscriber in which the plan agrees to pay for medical services to the subscriber for his medical needs. The plan agrees to pay physicians a stipulated, predetermined fee for these services. The fee is below the customary fee for medical services charged in the community. The plan is sold usually to individuals or families, whose incomes are below a specified amount. Most plans set an $1800 income level for the individual and $2500 for the family. This plan is usually organized by the medical society or by physicians. This plan sells doctors' services. In order for the plan to function successfully it must be endorsed and supported by the physicians who participate.

(B) *Indemnity Plans*: In this plan a contract is sold to the subscriber. It stipulates that specified amounts of money are paid to the subscriber for any of the diseases specified in the contract, the physician arranging with the subscriber for his individual fee for each disease regardless of the contract. The fee may be more or less than the specified fee of the contract. The payment is made directly to the subscriber unless the subscriber endorses an assignment. The above plan may be financed by any medical society's organization or the medical society may sponsor any commercial insurance company's contract, making any arrangements they desire. The contract is then sold by the commercial insurance carrier. This plan does not sell the doctor's services. It furnishes the patient money to help pay his doctor's bill. It does not disturb the private practice of medicine.

(C) *Combination Plan*: (A) remuneration on a service basis below a specified income level; (B) remuneration on an indemnity basis above that level.

As Chairman of the Committee I would like to state that in my opinion there is much confusion in the minds of physicians concerning the nomenclature used in discussing these plans. There are prepayment plans for medical care, medical service plans, and medical coverage, likewise indemnity plans. It is a fact that a service plan for complete medical care may be a part of an indemnity plan, the difference being that it represents complete medical coverage for a certain income level and that the plan pays the physician the prearranged fee which is full coverage.

Your Committee would like to state that we have noted the amount of money required to finance various plans. It varies with the plan, the enabling act in each state or the state's insurance department's requirement in that state. It is the opinion of the Committee that if the Illinois State Medical Society does not want to enter into the responsibility of financing the plan, coverage can be arranged with a commercial insurance carrier.

Your Committee having reviewed carefully all these plans has recommended to the Council and to the House of Delegates that the Illinois State Medical Society adopt an indemnity type of plan. Your Council was instructed by the House of Delegates, as per the resolution, to make this study and to put into operation a prepayment plan for hospital and medical care. It is the Committee's opinion that the various plans for hospital service throughout the state are covering or can cover the needs of the people of the state for a plan for hospital service. Your Council has gone on record as recommending an indemnity plan for medical care. Your Council must now decide what coverage they want to include and whether the indemnity will be partial or complete. It must also decide how this plan will be organized and financed, whether the Illinois State Medical Society as a society wants to finance a problem of this type either through Society's funds or by solicitation of funds from physicians or by the selling of bonds to cover this expenditure, or whether it desires to endorse a commercial carrier to assume this contract and at the same time stipulate the contents of the contract that should be written.

The Committee recommends that you endorse an indemnity prepayment plan, establishing an income level with a combination type of plan.

Respectfully submitted,

CHARLES H. PHIFER, Chairman

EXHIBIT "B"

PREPAYMENT PLAN FOR HOSPITAL CARE

Plans for Hospital Care

A. Hospital service (approved by House of Delegates of A.M.A.
   1. Board
   2. Room
   3. Nursing
   4. Incidentals
   5. No Medical Service Included

B. Hospital Service (such as Blue Cross and other similar groups with same objective).
   1. Board
   2. Room
   3. Nursing
   4. Incidentals
   5. X-ray
   6. Pathology
   7. Anesthesiology

*The inclusion of x-ray, pathology and anesthesiology is not approved by the House of Delegates of the A.M.A. because they constitute medical care.

**It should be noted that plans for hospital service were originally drafted to cover hospital service only.

In many instances the main organization or Blue Cross has been entering the field of prepayment plans for medical care.

This is a separate entity.

It is also to be noted that numerous independent hospital service plans have recently completed programs with commercial insurance carriers to furnish indemnity insurance for medical care as a companion piece to their hospital service plan.

EXHIBIT "D"

PREPAYMENT PLANS FOR MEDICAL CARE

Plans for Medical Care

A. Type of coverage
   1. Medical
   2. Surgical
   3. Obstetrical
   4. Fractures or other special medical services.

B. Manner of operation and remuneration
   1. Service Plan for Medical Care (Complete)
      a. This prepayment plan sells a contract to the subscriber in which the plan agrees to pay for medical services to the subscriber for any of the specified list of diseases named in the contract.
      b. The plan agrees to pay physicians a stipulated predetermined fee for any of these diseases.
      c. The fee is below the customary fees for medical services charged in the community.
      d. The plan is sold usually to persons or families whose incomes are below a specified amount.
      e. Most plans set an $1800 income level for the individual and $2,500 for the family.
      f. This plan is usually organized by the medical society or by physicians.
      g. This plan sells doctors' services.
      h. In order for the plan to function successfully it must be approved and endorsed by the physicians who participate in it.
      i. The outstanding example of this type of plan is the Michigan Medical Service.
   2. Indemnity Plan.
      a. In this plan a contract is sold to the subscriber.
      b. It stipulates that specific amounts of money are to be paid to the subscriber for any of the diseases designated in the contract.
      c. The physician arranges with each subscriber for the fee charged for his individual care of each disease.
      d. The fee charged may be more or less than the specified payment of the contract.
      e. The payment is made direct to the subscriber unless the subscriber endorses an assignment.
      f. The above plan may be a part of any medical society's organization or sold by commercial insurance carrier.
      g. It does not sell the doctors' services.
      h. It furnishes the patient money with which he may help pay his doctor bills.
      i. It does not disturb the private practice of medicine.
   3. A combination Plan.
      a. Remuneration on service basis below specified income level.
      b. Remuneration on indemnity basis above that specified income level.

C. Description of Professional Services Included in Plans
   1. General medical care.
      So far no satisfactory basis has been found to evaluate financial statistics for this type of plan where medical care is rendered in the home. Several experiments are in progress.
   2. *Medical Care Rendered in Hospital.*
      a. Most prepayment plans consider this the first step to take toward a full coverage plan.
      b. The subscriber usually pays for the first three days and then the plan for the next 20 to 30 days.
   3. Surgical and Obstetrical
      Most plans offer these as a joint benefit, though the latter is included only on the family contract.
   4. Special medical services, such as x-ray and anesthesia.
      a. We are informed by the Hospital service plans that the public is requesting that these services be included in their contracts.
      b. Most plans provide only a specified sum to be paid for these services in each contract year.

D. Territory Included in Plan.
   1. State wide
   2. County
   3. Neighboring counties.

E. How Financed
   1. Medical Society (state, county or counties).
   2. Subscriptions from physicians
   3. Subscriptions from industries
   4. Subscriptions from public benefactors
   5. Insurance companies.

F. How Administered
   1. By medical society (Administrative Board, state or counties)
   2. Jointly with Hospital Plan
   3. Insurance Company
   4. Blue Cross Plan.

G. What Physicians Participate
   This depends on the type of plan and how it is organized and financed.
   1. The Service Plan requires the cooperation and enrollment of the physicians for them to participate in the plan.
   2. The Indemnity Plan would be open to all physicians.

Dr. Phifer: REPORT OF THE COMMITTEE TO STUDY PREPAYMENT PLANS FOR MEDICAL AND SURGICAL CARE:

TO THE COUNCIL OF THE ILLINOIS STATE MEDICAL SOCIETY:

I think it would interest all of you to know that in the interim since the special meeting of the Council on October 14, 1945 there has been a great interest

manifest by the medical profession throughout the nation in reference to prepayment plans for medical and surgical care. The Council on Medical Service and Public Relations of the American Medical Association called a nationwide meeting of the medical representatives of the 48 states and the District of Columbia which was held in Chicago on October 19-20. The objective of this meeting was to discuss existing prepayment plans throughout the nation, likewise the need and the feasibility of an organization for a nationwide prepayment plan. This conference presented many interesting points for discussion. In view of the interest manifested it was deemed best by the Conference to call a second meeting of the same group just prior to the meeting of the House of Delegates of the American Medical Association, so that their action might guide the Council on Medical Service and Public Relations in their action on the subject. The date was set for November 30 and December 1. You, however, will recall on November 19th President Truman announced his compulsory health program thus stressing the need for immediate action by such a Conference. At the later Conference a committee was appointed to draft a resolution which was presented to the House of Delegates of the American Medical Association. The resolution called for consideration of a national voluntary prepayment plan for medical care. The resolution was referred by the Speaker of the House of Delegates to a Reference Committee of which Dr. Edwin S. Hamilton was chairman. This committee carefully studied the resolution and recommended to the House that it be referred to the Board of Trustees and the Council on Medical Service and Public Relations for study and immediate action.

In reference to the report of the Committee on the Study of Prepayment Plans for Medical and Surgical Care of the Illinois State Medical Society, your chairman desires to state that following the last meeting of the Council the chairman of the Council appointed a subcommittee composed of the following members of your Committee on Prepayment Plans, Mr. Neal, Drs. E. S. Hamilton, J. H. Chivers, Charles H. Phifer, with Drs. E. P. Coleman, Robert S. Berghoff, Harold M. Camp and Percy E. Hopkins as ex-officio members. This committee was to give further detailed study and evaluation to the contracts offered by commercial insurance carriers; likewise to give careful consideration to other principles that might enhance the value and benefits of policies; to interview commercial insurance carriers in reference to same, and to select the ones that fulfilled our requirements.

The sub-committee after careful consideration and deliberation drafted the following principles to be used in helping to formulate an insurance policy that might be endorsed by the Illinois State Medical Society, to be utilized in coverage for medical, surgical and obstetrical care.

GENERAL PRINCIPLES TO BE CONSIDERED REGARDING INSURANCE CONTRACTS FOR MEDICAL AND SURGICAL EXPENSE

A. There should be created and maintained by agreement with each company, a medical advisory committee to consider and rule upon controversies which may arise between or among the carriers, the public and the profession.

B. Surgery in the home and office should be covered, as well as surgery in the hospital. With proper safeguards to minimize abuses, non-surgical service should be covered in hospital, home and office.

C. There should be excluded from coverage cases where the patient is entitled to compensation under the Workmen's Compensation Act, the Industrial Diseases Act, or other similar state or federal legislation; and also excluded should be all medical, surgical and obstetrical service rendered in federal, state, county or municipal institutions in which the patient is entitled to free service.

D. The policy should indicate that the sums payable thereunder shall constitute payment in full to the physician only in the event that policyholder's annual income, if he is without dependents, is $1,500 or less, or if he has dependents, the combined annual income of policyholder and his dependents is $2,000 or less.

E. There should be no provision rendering policyholder ineligible at age 65, or some other definite age, except for good cause.

F. Should policyholder leave the insured group, he should have the right, by payment of the same premium in advance, to continue the insurance for at least three months.

G. Unless the delivery fee is at least $50.00 in obstetrical cases, additional provision should be made for prenatal and postnatal care.

H. Indemnity up to $15.00 should be included to cover the cost of necessary x-ray work, either in office or hospital.

I. A reasonable indemnity should be provided to cover such costs as blood chemistry, electrocardiogram, basal metabolism, etc.

J. Exclusion should be made for the following: periodic "check-up" examinations; treatment for venereal diseases; and treatment for mental disease rendered in an institution, but not otherwise.

K. Dependents should be limited to spouse and children age 3 months through 18 years.

You will note that B and D are in reference to problems that you requested the Committee on Prepayment Plans to give further consideration at your special meeting of the Council on October 14, namely calls in the home and office and income levels. We communicated with the insurance companies that had previously signified an interest in drafting a policy for the Illinois State Medical Society. We also mailed them copies of these principles. We requested each representative to discuss these principles with his company and advise the Committee when they would be able to appear before the Committee and make a report as to what their company would do relative to

a policy embracing these features, and also their premium.

We would further like to state that while in the process of the Committee's study during the past year we have interviewed many insurance companies, several of which are the largest writers of group insurance in the United States. The majority, however, were engaged in writing group insurance among the employed. We would like to further state that of all these people only three were interested in writing insurance of this type. They were the Michigan Life Insurance Company, the Continental Casualty Company, and the North American Insurance Company. In the past few weeks we have contacted a representative of the Marine Fire Insurance Company of St. Paul. This company is being considered by the Minnesota State Medical Society as a carrier for their plan.

We interviewed individually the representatives of the Michigan Life, the Continental Casualty, and the North American Insurance Companies, giving each company's representative an opportunity to discuss these general principles as they would apply to the contract of his company or as his company would be interested in including them in its policy; likewise the cost of the policy with inclusion of the additional principles.

The only two principals that produced any controversy were B, medical care in the home and office, D, income levels, the two subjects you referred back to the Committee at the Council meeting on October 14.

Medical care in the home and office: Two of the companies were not interested in considering the question of a policy covering medical care in the home and office. They each stated that the premium necessary to cover this entity would be so high that it would make it impossible to sell coverage to the public. One of the companies said it would cost $10.50 a month to include this type of coverage. Their refusal to cover medical care in the home is in line with the experience of other prepayment plans throughout the country which previously included this particular type of coverage and found it so expensive that it bankrupted their plans and had to be discontinued. This is also the experience of Michigan and other Plans. It is also the reason that most successful prepayment plans do not include coverage for medical care in the home. This is the hardest type of coverage on which to give an estimate on its operating expense. It is likewise the one that has caused most companies' financial failure.

Income levels: This is the division line (or yardstick) used by most prepayment plans that provide full or partial financial coverage for medical, surgical and obstetrical care to determine whether the patient's income falls below that level, in which case the fee constitutes full coverage for the physician's services. If above that level it represents a partial payment on his account.

The Committee in its report to you on October 14 recommended that you consider in relation to your indemnity plan a combination plan in which a level of $1800 for a single person and $2500 for a married couple be established, that below these figures the fees paid by the policy would be a full coverage for medical, surgical or obstetrical care, and that above that level the fees paid would apply as part payment on the doctor's services. The income level that was suggested was thought by a few members of the Council to be too high. This principle was referred back to the Committee for further study and recommendation to the Council. In view of your suggestion your Committee discussed this point and stipulated as per D, $1500 or less for a single person and $2,000 as the combined income for a married man and his dependents. I would like to state that as Chairman of the sub-committee, I noted the opinion of the members of the Council concerning incomes in urban and rural communities and the distribution of the population in this state. In view of your opinion I formulated a questionnaire which I sent to all the secretaries of the state medical societies asking for these points of information in their respective states. We noted that the geographical distribution of the population is similar in other states, New York being very similar, and that $1800 and $2500 income levels are judged by other states to be an average level adopted by their societies. It was brought out in the Conference on Medical Service and Public Relations of the American Medical Association that if a prepayment plan is to offer any constructive opposition to the Murray-Wagner bill it must have an income level of at least $1800 to $2500. There has been a tendency on the part of many men to feel that these income levels should be raised since President Truman has announced his compulsory health insurance plan.

In our interview with representatives of the Michigan Life Insurance Company, they thought we were too low and suggested $2500 for a single individual and $3000 for a married man and his dependents, while the North American's representative thought it should be $2,060 for the individual and $2600 for a family. The Continental Casualty Company did not discuss an income level as they were not interested in writing a policy for us. It was, however, brought out in the discussion with these insurance representatives that if an income level were to be established by an insurance carrier, it would be necessary for the insurance company to sell two types of contract, an A and a B; each would be sold on the policyholder's statement as to his income. It would later evolve upon the physician to see that his patient had purchased his policy in the right category as far as income was concerned when it came to adjusting fees.

In considering the three companies, the Continental Casualty which had previously been very anxious to enter into a contract of this type with the Illinois State Medical Society, now automatically eliminated themselves since they stated that in the interim since we had interviewed them they had drafted a companion medical contract for the Northern Illinois Hospital Service, Inc., which has offices in Rockford, Spring-

field, Champaign and Urbana, so that the contract can be sold by the above organization along with their hospital service plan. (Hospital service plans should confine their activities to hospital care, not medical care). They hope it would be sold to the entire membership of 260,000. They thought this outlet would offer them quicker and better sales' advantages than attempting to sell a medical contract for the Illinois State Medical Society.

The Michigan Life Insurance Company stated they were definitely not interested in selling a contract which included home and office visits because of the prohibitive cost of the premium which would make it very unpopular. However, your chairman has had several conversations with representatives of this company since that time in reference to medical care in the home. He wrote me under date of December 8th. From his letter I would like to quote the following:

"If it is absolutely necessary to include home and office visits coverage, in addition to coverage for medical visits to the hospital, we feel that we could prevail upon the company to write such a plan for the employed person at an additional premium of approximately 40 cents monthly. Such a plan would be as follows:

"Up to $150 per disability payable at the rate of $3.00 for a home or a hospital call and $2.00 for each office call. It would pay from the first visit in the home or hospital and from the third visit at the doctor's office. There would be no limit on the necessary number of calls in a day, nor would it apply to a maternity case because this is already provided for in the Surgical coverage."

The North American Insurance Company was willing to accept the principles we stipulated. Inasmuch as expediency is necessary, the Committee is of the opinion that we should proceed immediately with our indemnity plan and defer for say six months or a year or longer the question of establishing a combination plan with an income level. This will immediately give our State Medical Society an opportunity to develop some type of a prepayment plan. The recommendations of the Committee regarding the principles to be included in this contract have been accepted by the North American Insurance Company. They will go ahead and incorporate the changes in the printed form and have the new policy approved by the Insurance Department of the State of Illinois.

The policy is designed to be sold at a monthly cost of $1.00 for a male individual, $1.50 for a female, $1.00 for a child, and $3.25 for the entire family irrespective of the number of children between the ages of three months and the nineteenth birthday. It will pay for medical care in the hospital at the rate of $2.00 per day with a maximum of $150 in any one year, $2.00 per day for office calls and $3.00 a day for home visits. During one year the Company will pay $15.00 for electrocardiograph, basal metabolism and x-ray.

It is the sub-committee's opinion that this contract offers immediate opportunity for safe and economical coverage for the people of the state of Illinois and endorsed by the Illinois State Medical Society. This opinion was concurred in by the Committee on the Study of Prepayment Plans for Medical and Surgical Care in a meeting held December 5. It was our instruction to so present it to the Council for their consideration and adoption.

Your chairman desires to call the attention of the members of the Council to the following facts in reference to the sale of voluntary prepayment insurance if it is to help defeat compulsory health insurance.

1. The policy must offer the kind of coverage that the public and industry desire.

2. The premium must be low enough that it will appeal to the people who need it.

3. The organization must be financially sound.

4. It should be sold through groups that are in a position to help market it in large volumes. It is for this reason that in our report to you on October 14, 1945 we stated that while we as Committee were instructed to study prepayment plans for hospital service, it was the Committee's opinion that there were adequate organizations to provide that type of service. We felt that the hospital service groups should sponsor service plans and the medical profession, those for medical care. In that way hospital plans could endorse medical plans and the medical society could endorse hospital plans. In this connection you will note that we stated earlier in this report that the Continental Casualty Company preferred to sell medical care through the Northern Illinois Hospital Service.

5. Physicians and medical societies should try to cooperate to see that this type of insurance is popularized among the public who need such service.

The general committee gave consideration to the fact that although legal opinion regarding the instructions to the Council by the House of Delegates authorized the Council to put in operation a prepayment plan, the success of the operation of such a plan will depend upon the cooperation of the physicians of the state, that while in times past we have been unable to hold a meeting of the House of Delegates because of the O.D.T. regulations such a meeting is now possible if suitable arrangements can be found. Therefore, the Committee recommends to the Council that a special meeting of the House of Delegates be called to consider and endorse the plan adopted by the Council.

Respectfully submitted,
CHARLES H. PHIFER, M.D.,
Chairman

Members of the Committee presented papers on pertinent subjects relative to the different types of prepayment care plans: the advantages and disadvantages of each. Mimeographed copies of each paper were given to each member of the House of Delegates.

DR. CHARLES H. PHIFER: Mr. President, in order to bring this report before the House of Delegates, I move that it be adopted and recommendations

concurred in. (Motion seconded by Dr. Oscar Hawkinson, Chicago).

THE PRESIDENT: Before we enter into a general discussion, there are two people we would like to hear from. In order to give you a brief summary of the work of the Committee, I am going to call on Dr. Robert S. Berghoff, President-Elect to give us this summary.

DR. R. S. BERGHOFF, President-Elect of the Illinois State Medical Society. I consider it a very great compliment and privilege to be asked to summarize these very excellent individual reports. I do not know why I have been asked to give this summary; possibly because as the next president in May 1946 the load will be on my shoulders, or again because I was the acting chairman of the House of Delegates when this resolution was brought up.

In the first place, referring back to the meeting of the House of Delegates and particularly to Dr. Hamilton's discussion at that time, you will note from the copy that you have before you that Dr. Hamilton suggested that the survey be broadened to include all three types, specifically the Blue Cross, state medical service plans, and finally commercial. Further, the House of Delegates felt that because prepayment for the care of people from the "cradle to the grave" was in the offing, it was most important that this Society begin to put our own machinery in motion. Therefore, point No. 1, is that some plan be instituted by our Society and that as rapidly as possible. That brings us to three possibilities, the first, the Blue Cross Plan. I would like your records to show, as has been brought out before in one of these very excellent reports, that the Blue Cross Plan as a prepayment plan for hospital bills has done a grand job in Chicago. Starting from scratch eight years ago with $30,000 contributed by six public spirited citizens, it has now grown to where it has over 600,000 subscribers. I would like the records to show further that the Blue Cross Plan for Chicago has in the late depression years been of great help to many of our hospitals.

The Blue Cross can have nothing to do with prepayment medical plans in Illinois for two good reasons, first, they are not in the field, and second, for legal reasons they cannot be in the field, as I understand the present legal status. That answers the Blue Cross.

That takes us to state medical society controlled plans like Michigan, and I think there are at least fourteen more. That type of plan means that it has merit or fourteen states would not be so operating. However, in my opinion and I think Jack Neal shares that opinion, there are very sincere objections attached to that type of plan. The Illinois State Medical Society does not want to go into the insurance business.

That leaves us with only one other plan, that is a commercial plan under a commercial insurance carrier working under the rules of and in harmony with the medical profession of the state, that plan that we have been discussing all morning.

So after giving very due consideration to this important subject, and certainly no member of this Committee for the Study of Prepayment Plans, of which Dr. Phifer is the Chairman, could for a moment feel that this investigation was not thorough. There were times when I thought it had gone too far afield in its thoroughness, but certainly it has covered every type of insurance. We cannot be accused of being haphazard in this investigation. I have been edified not only with the thoroughness of this work not only by the Chairman but by the members of the Committee as well. So I feel for myself that the proper plan for Illinois for the time being and I say that advisedly, is the commercial plan working in close conjunction with the Illinois State Medical Society. Whatever the future or distant future may bring I do not know and nobody else does. It may mean in some years to come an entirely different hook-up. And with that stipulation, I give it my approval.

THE PRESIDENT: We have one more speaker. You have heard the reports of the members of the Committee. They have given you ideas and the results of a local bit of work and rather hard work. They have told you what their study and investigations have brought out and how they arrived at certain conclusions but it is on the basis of study only and not on the basis of clinical trial. There are certain Societies in this country where there has been a definite period of clinical trial, such as Michigan, California and certain parts of Missouri.

We are very fortunate to have with us today a man who has done a great deal of work in that line. He has not been in contact with the Committee. He is not biased by having worked with the Committee. He has had much experience, having been in charge of a Plan that is working at the present time. This man is the Secretary of the Kansas City Surgical Service. He is Secretary of the National Medical Service and he is Advisor to the Committee on Public Relations. I am going to introduce to you, Dr. F. L. Feierabend.

DR. F. L. FEIERABEND: Mr. President and members of the House of Delegates. I recognize what a terrible job your Committee has had. I know some of them quite well. It seems to me when you throw a veritable barrage of technique at a group of men who have not had opportunity to study these plans, what you obtain from these men is confusion. It seems to me that the important thing to determine here is, what do you want to do?

After listening to all this discussion, I am probably in a rather unique position but not one that is new to me by any means. It is the position of being in the minority. I am unalterably opposed to employing a commercial carrier to get this job done. I am expressing my position which is directly in opposition to everybody who has spoken. It is very definitely in opposition to your President-Elect who just preceded me on your speaker's stand. I have no objection to taking that position because I am convinced that I am right. I once heard a very learned man say: "it does not make any difference how many are opposed to you, if you know you are right". "You should

always remember that one with God is always a majority". I am fully convinced that that is true.

I have been working on these Plans since 1936. The original work was turned over to the Michigan Medical Service before Michigan formed its Plan. Our Plan will be in operation three years this June. It is a Service Plan. I am thoroughly convinced that a full Indemnity Plan is not necessary and a commercial carrier is less then not necessary.

When I speak about necessary, I am not referring to the social planners who contemplate putting on our statute books the Murray-Wagner-Dingell Bill. I am thinking about our responsibility to our fellow-men.

We, as members of organized medicine, have responsibilities. If we do not fulfill these responsibilities and duties, we may only expect others to carry on for us. I have been told that I should be prepared to answer questions. I shall be very glad to answer or attempt to answer any questions you may throw at me.

Now what should Illinois do? Here again I am a little bit confused. I heard Dr. Hamilton say it would take from $100,000 to $200,000 to start a Service Plan. I heard Mr. Neal say from $50,000 to $100,000 to start a Plan. I do not know why it would take so much money to start a Service Plan. We started one in Kansas City for a little less than $5,000 and we did not use all of that. We have been in operation almost three years; we now have $53,000 in reserve, we pay all our bills and have paid back the original loan that was made to start our Plan. The loan incidentally was made from doctors. We borrowed $25.00 from each professional doctor.

We do not have an Enabling Act in Missouri. We recognized it would be too long to get an Enabling Law through the Legislature when it met every two years. There is nothing that succeeds like success. If our plan is getting the public down and if our people like it, we have no fear from legal interference because the public will demand that this be permitted to carry on. A good many of you will say that we are skating on thin ice. Nothing has happened and I know nothing will happen. We have only 53,000 people covered but we do it on a service basis. In Chicago you should have at least a million people covered just as fast as you can write the contracts in the office. In the State of Illinois in five years you should have two or three million people covered. It must be sold. No matter how good a thing is, it must be sold.

The statement has been made that with a commercial carrier the medical profession must be in control. I do not know how you are going to do that. These insurance carriers are risking their money and they are not going to let you tell them how to set up the risk. They are going to do that themselves. Frankly, I do not see how you can control an insurance company today and six months or a year later withdraw that plan and start a Service Plan. Every individual interested in this problem wanted to start with an Indemnity Plan and they all came to the conclusion that it was not necessary and they then switched to a Service Plan. That is the universal history of all plans. The Missouri Medical Plan which covers the eastern part of the state and operates in St. Louis, operates on a cash indemnity. I was on the committee and the vote was three to two for an Indemnity Plan and I was in the minority. Now the boys in St. Louis are coming around to the fact that they want a Service Plan.

There has been a good deal of talk about income limitations. I think doctors by and large are fearful of a Service Plan. They fear that someone is attempting to set the fee. That is not the case. In the Service Plan, as we run it now, we have absolutely no difficulty. We have income limitations which are a good deal higher than you have suggested but we put the determination of that income level exactly where it belongs, that is, in the doctor's office when he talks to his patient. It is up to the doctor whether the whole fee is paid by the Plan or whether only part of the fee is paid. When your patient comes in you sit down and talk with him. You know what your Plan will pay on a service basis, you have the contract right before you. It pays $100.00 for an appendectomy. Obviously, if a man makes $10,000.00 a year he should pay more for an appendectomy. People do not object to that. That has been going on for years; Insurance Companies have been writing these policies for years. There is not any of them operating in our territory that pays as much as we pay. The A.M.A. has said that there should not be a third party interfering in the practice of medicine. If this plan of yours is approved it will do just that. You are inviting insurance companies to come in and interfere in the practice of medicine. All Insurance Companies have high priced officers to pay. All stock Insurance Companies have stock holders. Do not think that Insurance Companies are interested in this from a charitable point of view. They are interested to make money. If they have high priced officers and stockholders, you are paying money that should be paid for service. For the life of me, I cannot understand the wisdom of that. There is nothing difficult about billing your own Plan. There is no difficulty about retaining control. To me, that is most important, retaining control in the hands of the medical profession. Do not forget the old adage that he who pays the fiddler usually calls the tune and if the Insurance Companies pay for that, they will attempt to dictate the policies of the practice of medicine. I for one do not want Insurance Companies dictating to me how to practice medicine. When you set up your own plan you have directors, the majority of which will be doctors of medicine. If you do not like the policies these directors set up it is within democratic principles to change them. You cannot do that in an insurance carrier.

The expediency of time has been mentioned here. I told Dr. Phifer last night that a Service Plan could be started in Illinois five days after you get your charter. I do not know what the relations are be-

tween the medical profession and the Blue Cross. In some parts of the country there is controversy. As I have seen it, there should be no controversy. I am a member of one of the committees of Blue Cross and I have had no difficulty. There seems to be some contention that Blue Cross directors and Hospital Administrators have attempted to dictate the policies of the practice of medicine. On the other hand, it is said that the doctors are attempting to dictate the policies of the administration of hospital work. When you get right down to it, there is not much contention.

I will tell you how we do it in Kansas City and I think it is satisfactory. Surgical Care has a separate Board of Directors and we have an interlocking directorate between Blue Cross and Surgical Care. Dr. Ira Lockwood and I are on the Board of Directors of the Blue Cross and of Surgical Care. That gives us a hookup with Blue Cross. We have a separate Executive Committee composed of five directors, Blue Cross has a separate Executive Committee composed of one doctor and two laymen. Many times these two Executive Committees have met and discussed various problems. Many times policies regarding medical practice have been developed. In every instance these laymen who are directors of Blue Cross have said, doctor what shall we do? We have been working together for two and one-half years and there has not been a single dispute. We are a very strict contractural agreement. Both plans are under the same roof and are operated by the same director. This director is under order from Surgical Care to do certain things and he is under orders from Blue Cross to do certain things for Blue Cross. He cannot do a single thing about the practice of medicine without the full approval of the directors of Surgical Care. In the contract of agreement, we retain the right to investigate the books of Blue Cross. The operating costs are less for Blue Cross and less for Surgical Care. They have a sales organization all set up and they are ready to go. It is really a very simple matter to set up a Service Plan if you have a-sales organization that is ready to go.

The mechanics of the operation of a Medical Service Plan are not actuarially sound. We have had some discussion about Medical Service Plans and I would particularly not advise that you start with a Medical Service Plan because there is not too much known about it yet. A good many safeguards must be thrown about the giving of medical service. We give it in Kansas City but we make the patient go to the hospital. I am not sure that is a good thing. The reason you must throw safeguards about medical service is because medical service does not fit our formula. Incidentally, in any insurance the penalty must exceed the benefit. That is true in surgery, that is true in obstetrics, it is true in orthopedics but it is not true in medicine. There is no penalty in my sitting up half the night drinking too much and then calling my doctor because I am sick. There is no penalty in a hysterical woman having the doctor out three times a day.

Michigan attempted to run a Medical Service Plan and went broke. We should all take advantage of what Michigan learned. If you will start with a Surgical and Obsterical Plan only, you will make plenty of money.

DR. W. D. STEVENSON, QUINCY: The speaker recognizes the fact that you get no medical benefits, the only benefit being surgical. In that way how does the medical profession discharge its responsibility? This is an important thing. We do not discharge our responsibility.

DR. FEIERABEND: You do not discharge your full responsibility unless you give full coverage. You will find that only 5% of the people want opportunity to budget their insurance for ordinary medical care, but they do want to budget for catastrophic illnesses which are usually surgical and hospital. There is no commercial carrier that gives full coverage. Such coverage would cost $10.00 a month for the ordinary home and you could not sell that kind of a contract. Our costs are $2.00 for family coverage and $2.25 for the medical benefits we give. If you cover the patient for his hospital and his surgical care it is much easier to pay the balance. In that way even though you do not start with medical benefits you still do a good deal for most physicians who do surgery.

(Luncheon Intermission)

The meeting reconvened at 1:30 P.M.

THE PRESIDENT: I will ask Dr. Hamilton to report for the Credentials Committee.

DR. HAMILTON: The Credentials Committee has certified 43 from downstate, 47 from the Chicago Medical Society and 15 members of the Council, a total of 105. I move that this be made the official body for the voting strength. (Motion seconded and carried).

THE PRESIDENT: We are now ready for discussion on the motion which is before the House.

DR. ANDREW SULLIVAN, CHICAGO: Since Dr. Hammond has been with the Blue Cross and has been associated with industry and we have to look to industry for support in any plan, I would like to hear from him.

THE PRESIDENT: Dr. Hammond will you come forward.

DR. FRANK P. HAMMOND, CHICAGO: As I sat this morning and listened to the program, I thought of three features that the delegates of the State Society should give some weight to. One is that industry employs 65% of the employable people in the United States. When you think of selling that number of people a national program takes on significance of great importance. I have had sufficient experience to know that large industries when presented with a health program want a contract which covers hospitalization and whatever medical care you present. They want one payroll deduction. They will not only welcome it but they will demand it because it is in the air and we all know it. In the second place, it seems to me that a program of that

kind should be promoted, distributed and sold by a unified, coordinated agency of some kind. To have two agencies going into industry, one selling medical care and the other hospitalization is confusing. They do not like it; they want a unified plan. In the third place, it seems to me that the most important thing of all is control of a medical plan for the State Society. I do not know how many of you perused the papers that were distributed this morning. It is on the second page of Dr. Hamilton's report on the comparison of Medical Service Plans and Indemnity Plans. It states, "all of these facts have been considered in arriving at a decision to recommend immediate setting up of an Indemnity Plan with established safeguards so that the medical profession will retain some control in the operation of the Plan". When the Medical Society of Illinois presumed to present to the people of Illinois a Plan which they want to call their own and do it through a commercial insurance company, that very minute they have lost control. They may have their advisory committees and other committees but the ultimate control is by the company that is putting out the money and is running the show. I am going to call the attention of the men who have done industrial surgery to the fact that the companies providing industry with compensation insurance practically control the surgeons' fees. They pay just so much for everything and that is what you get and nothing more. They also, to a great extent, control hospital fees. There are men in this room that know when I was in active practice that I took my industrial patients to certain hospitals and I had to make arrangements to have a room at $4.50 a day and nothing more even though other patients paid $5.00 or $6.00. I am just expressing a warning. I am only one man.

I am connected with the Blue Cross Plan. I am entering my seventh year since I retired because of my health. In my six years of experience in the Plan for Hospital Care, I have had the responsibility of communicating with physicians and hospitals and I have found that the hospitals in this country with standardized procedures and policies which are passed upon by medical ethical knowledge are attempting to adhere to those principles. I am going to stop by saying that I feel that if the Illinois State Medical Society approves what they term a Medical Care Plan operated and controlled by a commercial insurance company, they will some day later decide they have made a mistake.

DR. E. S. HAMILTON: My father was a doctor. He had some very homily statements that he learned down in the southeastern part of Ohio. He said one thing I remember, the more you shake up a bottle of ink the darker it becomes and the less clear it is. I am afraid we are getting this so shaken up that we do not see what we are talking about. I have no desire to say anything to Dr. Hammond whom I have known for thirty years. I would not enter in a discussion with Dr. Feierabend. It seems to me we are getting away from the subject. We are talking about a lot of things. We have had a lot of talk about insurance companies. I have been writing about this in the Illinois Medical Journal ever since Dr. Whalen died. I can see a great change that has come over everybody. It has come over insurance companies, over industries, even over the Blue Cross and the medical profession. They are all scared to death. The medical profession are not the only ones who are scared. The Blue Cross is scared to death of this Truman Bill. If they pass the Bill there will be no Blue Cross; the same is true of insurance companies, the same is true of industries. They all know what it means to them.

Dr. Feierabend said they always start with the medical profession because they are poorly organized. I agree with that. Some of these changes are basic changes, the result of long thinking in these United States. We happen to be caught in the midst of them. I have no fight with the Blue Cross, I get along with them. The Blue Cross is anxious to work with us. They finally see it is to their advantage.

We have talked over selling this method through the Blue Cross. In Rockford there is one company that is now selling prepayment medical insurance on an indemnity basis through the Blue Cross; it is the Continental Casualty Company. I heard the man from this company say he had entered into an agreement by which the Blue Cross was going to sell the Plan. This Committee has talked over selling it through the Blue Cross. I see no reason why we cannot sell it through the Blue Cross, why we cannot sell it through the Blue Cross just as fast as we could sell it through any other company if the return is the same and the coverage is the same. They talk about how easy it is to sell this. Dr. Feierabend said he spent 3½ years working on the problem before they were ready to start. He has 53,000 subscribers out of a possible million in 2½ years. He says that it could be done in five days in Illinois. That is too good, I do not believe it. I do not think it is humanly possible. Listening to the expressions of opinions I have heard, I do not believe everybody knows what we are talking about. What we are trying to do is to settle on a method whereby a prepayment medical plan can be put into operation. If this plan does not work let us have other plans. We have 12,000 doctors in the State of Illinois. Before you can put in any kind of a plan you have got to enter into a contract. If you try to write a contract and extract $25.00 from each doctor it will be ten years rather than five before you get the plan into operation. It does not make any difference what we do. I do not want anybody to think I have the answer. There is nothing personal in what I have said. There is nothing that has been said by Dr. Feierabend or by Dr. Hammond that this Committee has not gone over and talked about. We started out for a Medical Service Plan and we have gradually changed our minds. That is the privilege of most people. It is all right to talk about ethics and what morally we should do, but life is not as simple as that.

We have got to get this thing going and we have to try to meet the problem as it is today. I am not

trying to tell you gentlemen what to do. We should take both sides of it but let us complete the decision on the subject, whether we will accept the report or not. If we do not want it, let us vote it down and give it to another committee. I am quite sure that your Committee does not wish to set up a large peace time plan. I started to say that life is not as simple as always standing up for what you believe. Sometimes the fellow that goes right down the line and bumps into everything does not get as much as the fellow who stops a little to see the objects that are ahead. Occasionally, we have to give in a little in order to accomplish our objectives. We have a great objective to accomplish. I do not want to stop the discussion but remember we are discussing whether we are going to accept this report or not.

DR. A. H. BITTER, QUINCY: With all this sheaf of literature we have received this morning, to the average delegate it is quite confusing. I do not think we can make an intelligent decision as to how this should be planned. We have no particular enemies nor particular friends, only medical doctors.

DR. W. E. KITTLER, ROCHELLE: We have heard discussion about the man in the city but you never say anything about the man in the rural district. Your House of Delegates is composed of men also from the country. I have heard discussion pro and con and I do not know which way to fall. I would like to hear somebody say what they expect to do about the farmers.

THE PRESIDENT: Mr. Neal, can you answer some of those questions?

MR. JOHN W. NEAL: What the last speaker has dwelt upon is one that concerns the Committee. Many years of study have been devoted to it. He indicated that in twelve or thirteen years, Michigan has sold only 12% of the people. Dr. English and I talked about it at luncheon as to what is the reason for that disappointing factor. There are a lot of reasons. I personally feel that the principle reason is one that demonstrates the stability of the old line insurance company over the Service Plan. The Service Plan has only one avenue of sales, that is by going into an executive office of industry and lining up the employees. That is the type of sales that is carried out by the majority of Blue Cross Plans at the present time. How it would work out if it were sold by commercial insurance companies, I do not know except I feel that they have a sales agency superior to the Blue Cross, in that they have a sales agency in every cross roads of the State of Illinois so that coverage could be brought to the farms through the various farm organizations. I think we all recognize that there is a very definite problem to be solved. I think additional sales are needed to cover this in quantity but the ordinary non-profit service organizations do not have the facilities for effecting sales in the volume if we are to solve a problem which most of us feel should be solved.

Before sitting down I asked Dr. Coleman for the opportunity to say a few words. I do not belong to this Committee. I have been very much interested and I have sat in at every one of their meetings. If we go back to Dr. Bitter's question whether to put into immediate use a Plan for Prepayment Medical Service then we have this problem to decide, are we going to set up a non-profit service organization or employ one of more insurance carriers? As the case stands now, Dr. Feierabend on one hand believes very sincerely and very intelligently that it should be solved on a non-profit service basis. He has not said so but I believe he thinks so, that there is something inherently unholy about approaching this problem of Prepayment Medical Care from a private concept. To me that is not true. I see nothing inherently wrong about selling insurance. Mr. Mannix and I have argued as to whether the Blue Cross sells insurance. I say they do and he says no. I see nothing evil about having a private company sell this plan. That is no more so than practicing medicine as you gentlemen do or practicing law as I do.

Historically, the Blue Cross came into being early in the depression. Insurance Companies were not interested in that type of coverage for two reasons, first they thought Hospital Insurance could not be written profitably. On the other hand we were in the depth of the depression and people had no money for such a fool thing as Hospital Insurance and the insurance company being interested in making a profit, did not go into that coverage. The results in terms of contracts sold since that time have a tremendous amount of significance to me. The Blue Cross Organizations in the United States and Canada have approximately 18,000,000 at the present time. The commercial insurance companies did not start in that field of protection until some four or five years later and at the present time they have somewhat in excess of 40,000,000 subscribers. In about two-thirds of the time they have attracted over twice as many subscribers as Blue Cross has been able to achieve. That makes me believe all the more the fact that hundreds of accident and health insurance companies are the ones that will be primarily interested and have the facilities to make this type of insurance available to a much greater segment of the American people than any non-profit organization or combination of non-profit organizations operated in the State of Illinois.

I would like to say one or two more things very briefly. Dr. Feierabend has made a very able and unique presentation in favor of a non-profit service plan approached at the risk of being accused of quibbling, I would like to state that none of these organizations are nearly as non-profit as they appear. Dr. Feierabend spoke much more freely than he would in front of the Department of Internal Revenue. Some of these non-profit organizations are accumulating large sums of money; in other words, they are really mutual insurance companies. Those profits should go back to the people in the form of greater benefits or dividends or in whatever way mutual insurance companies handle such a situation. I would say that the element of profit as a motive for selling medical in-

surance would in the long run prove to be a blessing rather than a curse. Once it has been demonstrated that this type of insurance could be sold on a profit basis, the commercial insurance companies will steer it into a field so that prepayment medical insurance will spread like wild fire in this country.

There is one thing I would like to make clear. Dr. Feierabend said in connection with hospital insurance that the A.M.A. has taken the position that no third person should be interjected into the physician-patient relationship. That, as I see it, will not take place if a commercial insurance company sells this insurance. The commercial insurance company has no relation to the doctor. Its relation is to the patient. It is purely a reimbursement and the doctor is not dealing with the insurance company unless there be an assignment to him by the patient in which case he would look to the insurance company for the payment of his bill. I believe it cannot be said that selling through a commercial carrier means the interjection of a third party into the physician-patient relationship.

DR. PHIFER: I would like Dr. Weld to speak about the Plan in Winnebago County.

DR. E. H. WELD, ROCKFORD: About three years ago we heard about the Murray-Wagner-Dingell Bill and we wondered what we could do about it. We had a planning committee which met and discussed the various features of this bill which is now called the Truman Bill. We thought we should have some sort of plan to carry out some form of medical and surgical insurance to the people who wished it. We did not like the plan of Surgical Service alone. We felt that we should include all branches in the practice of medicine, daily office visits, house calls, etc. We went over this whole problem and found that we were hot about establishing a Service Plan but found we could not do it because we did not have an Enabling Act. Then we took up the idea with an old line insurance carrier. We established certain basic principles upon which we would work with this company. We said that any insurance company could write the insurance if they followed the standards that we laid down. The reason was that we established contact with one company about two years ago. We have been going along slowly since then selling these contracts. The contract we have is very satisfactory. It sells for $3.00 a month for medical and surgical service for the family or $30.00 for the year.

I feel sort of proud about this because our conclusions were practically the same as the conclusions that were read before you this morning. I feel that this form of insurance is more satisfactory than surgical service or other plans such as they have in most because it does cover medical as well as surgical service.

The Plan we have had in operation is probably not just what we want, it is open to revision. The insurance carrier after a year found it possible to increase the benefits. I feel this form of insurance will become competitive and the insurance will sell that will give you the most for your money. Since it is competitive, we do not need to worry about excessive profits that any individual carrier will make. With us, this form of insurance over a short period of time, has been satisfactory. We have not sold nearly as many policies as we would like to for several reasons: one is that industry as a whole is waiting to see what is going to happen. Another thing as Dr. Hammond brought out, is that they like their insurance in one package. I see no reason why that cannot be worked out so that there is only one deduction. Another reason is that there are things in the air and we do not know what to expect. Another reason is that the entire medical profession has not gone out for this in a whole hearted way. If this Plan is endorsed today by the House of Delegates, it means that we all have to get behind it and sell it or it will not be a success.

DR. PHIFER: This Committee has devoted many months to this question. Sometime ago when we brought in our first report to the Council, the question was brought up as to what type of plan we could present to the physicians in the rural communities. Answering Dr. Kittler's question, I would like to say that in Dr. Feierabend's Plan there is no medical care given in the home. It does have medical care in the hospital. In my report I called attention to the fact that medical diseases wrecked the Plan in Michigan, and made them discontinue it. When this Plan was proposed there was some provision made for medical care in the home. That cannot be done under a medical service plan. The only way it can be done is on an indemnity basis.

Now Dr. Hammond referred to the question of a Hospital Service Plan. I have great respect for all Hospital Service Plans but they are not non-profit. I think without question this plan in Chicago has a reserve of a million and a half dollars. The only thing about it that is non-profit is that the Directors do not get paid for attending meetings, otherwise it is all for profit.

The Hospital Service Plans object to any commercial carrier on the basis that in selling hospital insurance or medical insurance, they do it for profit. Only a few months ago the Hospital Service Plan in this State was paying $4.50 a day for 21 days. Recently four big hospitals in Chicago, Presbyterian, St. Luke's, Wesley and Passavant demanded that the Plan give greater benefits to the patients. As a result the Plan extended coverage from 21 to 30 days. That is the picture on Hospital Service.

In the proposed Murray-Wagner-Dingell Bill, all hospital service plans will be wiped out.

DR. J. P. SIMONDS, CHICAGO: It seems to me that there is one feature of this question that has not yet been brought up. If a patient or a family is insured under the Service Plan, then it would seem to be necessary to set up some standards of income. Under those conditions I presume the physician would have to take the fee indicated in the insurance policy under such a Plan. On the other hand, if the in-

surance plan as recommended by the Committee is on an indemnity basis then it seems to me that neither the Committee nor the Society nor the private physician need necessarily be concerned with the income position of the person who buys the insurance because as I understand it under that plan the relationship is strictly between the insurance company and the patient. The doctor would be able to set his fee according to his view of the income status of the patient. If he wanted to accept the fee provided in the insurance policy it is up to him. If he thinks the patient is able to pay more, he could charge more. It seems to me that that is the particular difference between the two types of insurance.

DR. LUCIUS COLE, OAK PARK: Does this Plan approve only one Insurance Company?

DR. PHIFER: Any insurance company that complies with our principles may sell this insurance. The Blue Cross under our Enabling Act cannot operate a medical program.

THE PRESIDENT: The question before the House is that the recommendation of the Committee be upheld. We will take a rising vote.

The vote is 64 for and 10 against. Therefore, the motion is carried.

DR. ROBERT HAYES, CHICAGO: I would like to move that this Committee be given a rising vote of thanks for their work. (Motion seconded by Dr. Scatliff and carried).

THE PRESIDENT: A Committee will have to be appointed to carry out the recommendations.

DR. HAYES: I would like to move that the Committee that brought in the recommendation be the Committee to supervise its activity. (Motion seconded and carried).

DR. OCHSNER: I move that the House of Delegates go on record as opposed to the Murray-Wagner-Dingell Bill. (Motion seconded and carried).

THE PRESIDENT: After the last war there were several million ex-service men who had to be taken care of. Many of them had service connected disabilities. Later on Congress decreed that a man with a service-connected disability was entitled to care at government expense. At the present time over twenty million of these men and women are now eligible to treatment at government expense for service connected disabilities. These service-connected disabilities will require home treatment or hospitalization. As a result many hospitals are to be built or are in contemplation by the government. After the last war Dr. Shoulders made a recommendation that these people be able to get treatment from the physician of their choice at home. That was not accepted. Now to the amazement of everyone General Hawley is asking that the state society cooperate with the Veterans' Administration by giving the veteran care by his physician. This is revolutionary. It is the first time that a government bureau has offered to decentralize itself. By so doing not only the veteran will be benefited but the medical profession as well. I will ask Dr. Camp to read the fee schedule that has been proposed.

DR. CAMP: The fee schedule is the schedule that was approved by the Kansas Medical Society for this type of work and also by the Veterans' Administration.

THE PRESIDENT: I will call upon Dr. Hopkins to report on the plan as O.K.'d by the Council.

DR. HOPKINS: I will ask Dr. Camp to present a report of his recent trip to Washington to confer with members of Gen. Hawley's staff.

DR. CAMP

To: The Members of the House of Delegates, Illinois State Medical Society.

On October 19, 20, 1945, a special conference was held at the A. M. A. headquarters in Chicago, attended by the Presidents and Secretaries of the respective state medical societies. Scheduled on the program at this conference was Major General Paul R. Hawley, Acting Chief, Medical Services, of the Veterans Administration. General Hawley, himself a physician and the third generation of physicians in the Hawley family, was given the go ahead sign by General Omar Bradley, Director of the Veterans Administration, to develop a program for care of veterans with service connected disabilities.

General Hawley first outlined his proposed program at this conference on October 19, and stated that he hopes to see veterans with service connected disabilities treated at home by the physician of their choice and at the expense of the Veterans Administration. He is endeavoring to avoid the troubles which developed following World War I in the care of veterans, as many of you will recall them.

He is desirous of having every state medical society submit their own program, and accompanying it a fee schedule satisfactory to the physicians, and yet fair to the Administration, as he believes the physicians should receive the approximate rates for service that are being charged to the usual patient, yet remembering that they should not be expected to be charged rates such as may be submitted to a few patients in the high income brackets.

On December 8, your secretary received a call from General Bradley's office in Washington, urging the State Society to send a committee or one of its officers to Washington as soon as possible to get information concerning the proposed plan, to be submitted to the State Medical Society in the hope that they will quickly develop and approve a plan, and likewise a fee schedule to be submitted to the Administration for their approval so that it may be placed in action immediately.

The President, Chairman of the Council and the President-Elect were informed, and they insisted that your secretary make the trip to Washington with a minimum of delay. On December 11, we therefore went to Washington where we spent two busy days discussing these proposals, and getting the framework for a proposed plan. A report was given to our Council the following Sunday, December 16, at which time the recommendations of General Hawley were approved in principle, and a committee consisting of the Chairman of the Council, the President, President-elect and the Secretary was appointed to develop a plan to be sub-

mitted to the Council and to this House of Delegates for final action.

At the meeting of the A. M. A. House of Delegates, held in Chicago, December 3-5, 1945, General Hawley again outlined his proposal, and this was unanimously approved by the House of Delegates, which urged all state societies to submit their programs and fee schedules so that the plan may be placed in operation at the earliest possible moment. At this appearance of General Hawley, he stated frankly that he is first of all a physician, a member of his county, state society, and a Fellow of the A. M. A., as were also his father and grandfather. He hoped that American Medicine will continue to function as a private enterprise, and hoped that we will never be compelled to practice under a compulsory system such as has been repeatedly proposed in Washington in recent years. He believes his proposed program for care of veterans by the physician of choice, and taking this work as far as possible from Government physicians, will be a step against the socialization of medicine. He also reminded us that this is the first time an important branch of our Government has been willing to recommend the development of a plan whereby types of care as a government responsibility, are referred to civilian physicians.

At the time of our visit to the Veterans Administration headquarters in Washington, we were informed that only one state medical society had submitted a plan which had been approved, — the Kansas State Medical Society. We were given a copy of the fee schedule which had been set up in Kansas, approved by their own medical society, then approved by the Veterans Administration. They were considering approval of a Michigan plan at that time, which we know was approved only a few days ago. Likewise the State Medical Society in New York and in several other states are now working on their respective plans which will be submitted soon, if they have not already been sent to the Veterans Administration for approval.

Our Committee, as will no doubt be reported by the Chairman of the Council, has developed a program which is subject to approval by this House of Delegates, and as it is in complete accordance with the requirements of the Veterans Administration, and also with the recommendations of the A. M. A. House of Delegates, we hope that you will give it the consideration at this time which it deserves.

Respectfully submitted,
Harold M. Camp, M.D.
Secretary

DR. PERCY E. HOPKINS: The Council after hearing the report of Dr. Camp on his return from Washington appointed a committee from the Council to consist of Drs. Coleman, Berghoff, Camp and myself. This committee was directed to draw up a plan and to consider the fee schedule based on this schedule set up by the Kansas State Medical Society and approved by the Veterans' Administration. The plan which this Committee presents for your consideration for the care of veterans with service connected disabilities will be submitted to the office of Major General Paul R. Hawley and will be accompanied by a fee schedule. The plan reads as follows:

THE PLAN

The Illinois State Medical Society with approximately 9,000 members residing in the 102 counties of our state, approves the proposed plan of Major General Hawley to have veterans with service-connected disabilities cared for at home by the physician of their choice, and recommends to its members that they cooperate fully in the consummation of this plan.

We approve the setting up of a state office for the Veterans' Administration as closely as possible to our Society headquarters in the City of Chicago so that the establishment of service connection of disabilities may be established with a minimum loss of time.

The Society will maintain in this Chicago office a complete list of members of this Society arranged by counties, and duplicating the list on individual cards which is maintained in the office of the secretary at Monmouth. Pertinent data concerning each member will appear on these cards.

A list of specialists will be maintained in the Chicago office arranged by counties, showing the physicians who are capable of giving special type care as may be desired. In arranging this list reference will be made to affiliation with special societies such as American Boards, the several American Colleges, diplomats, etc. We wish to call attention however, to the fact that there are many capable specialists in the State of Illinois who do not affiliate with these special societies, colleges, academies, etc.

The Illinois State Medical Society will if it is desired by the Veterans' Administration, select an advisory committee to aid the Administration in settling controversial subjects, lack of adherence to the approved fee schedule, or any other matter which may be referred by the Administration at any time. If it should be desired, similar advisory committees will be set up within the component county medical societies throughout the state.

Through all publicity channels available the Illinois State Medical Society will from time to time stress such important subjects as adequacy of treatment given to veterans, the keeping of adequate records, and the necessity for procuring approval through the state office of the Veterans' Administration for care of veterans after service-connection has been established.

The membership cards of the Illinois State Medical Society to be on file at the Chicago office will be available for the medical personnel on duty at the adjoining or nearby Veterans Administration office so that information concerning physicians, their type of work and the location of their offices may be determined quickly when such information is desired.

In publicizing this program after it has been approved and placed in operation, every effort will be made to request that physicians caring for veterans do not go long distances to make residence calls espe-

cially if other physicians willing to do this work live and work closer to the disabled veteran.

The Illinois State Medical Society in presenting this proposed plan for the care of veterans with service connected disabilities at home by the physician of their choice, desires to commend General Hawley and his associates for permitting us to submit a plan which if approved, will be given due publicity among Illinois physicians, and the Society will cooperate in every way possible with the medical department of the Veterans Administration in carrying out the program as presented.

This plan was presented to the Council and approved unanimously and comes to the House of Delegates with that approval. So far as the fee schedule is concerned, you gentlemen have been handed copies of the Kansas fee schedule which has been approved. The Committee in considering this fee schedule felt that each and every item should be considered. The Committee knew that it was not capable of deciding fees that were set up by some of the specialists. For that reason letters were written to some of the men in the specialties but little response has been received. It is planned that the delegates take this fee schedule home and if they have comments to make, that they send them to the Secretary. I move the adoption of this plan. (Motion seconded).

DR. A. J. SULLIVAN, CHICAGO: I have looked over this very carefully and I feel that the fees are very fair. I just wonder if at a subsequent time revisions can be made. I just note that the fee for rectovaginal fistula is $100, while for vesicovaginal fistula which is more difficult is $75. Also, there is no provision for resection of bladder tumors. They have papilloma of the bladder $75.

THE PRESIDENT: The Committee in going over this recognized some inconsistencies. For instance, intestinal obstruction is $100, but nothing is said about resection which takes much more time.

DR. HAMILTON: I would like to amend the motion, that this committee be empowered to revise the schedule in accordance with the comments received from the House of Delegates or from the specialists. (Seconded).

DR. SKATLIFF: I would like to ask if this fee schedule is to be considered the fee schedule of the Veterans' Bureau or of the Society.

THE PRESIDENT: It is the fee schedule of the Society, because Michigan has a different one.

DR. CAMP: In discussing the matter of fees in General Hawley's office they recognized that even though there are 464 items in the schedule submitted by Kansas State Medical Society, many things that will come up are not in this schedule. It will be one of the functions of this Advisory Committee to submit fees for special service, in a long drawn-out case, or unusual surgery the fees should be submitted to the Committee. Those things will be taken into consideration by General Hawley. General Hawley has in his office some eight or ten outstanding specialists, such as Paul Magnuson, Elliott Cutler, Fred Coller, & others.

DR. GREENING: To what veterans will they apply?

DR. CAMP: To veterans with service-connected disability. I want to correct one statement which the President made when he referred to the WACS and the WAVES. Although it applies to service-connected disabilities for men, for women it is for any ailments. At Hines Hospital they have a record of every Illinois service man and they will have a private line to the Chicago headquarters so we can get a record. They will have a man on duty in some of the large cities.

DR. GREENING: How will the average doctor know a service-connected fracture?

DR. CAMP: If he has a dislocation and then gets a fracture. They propose to have this office with a medical advisor on hand, so that the service connection can be determined.

DR. VEHE: If the physicians do not watch themselves in approving this, they will find themselves taking care of 20,000,000 veterans and dependents.

DR. J. J. MOORE: The fees for laboratory work are higher than we ordinarly charge your patients.

THE PRESIDENT: This is for service-connected disability only. The man with a service-connected disability is still entitled to service. The question is, who is going to render the service. We can care for them.

THE PRESIDENT: The first question is on the amendment, that the same Committee be empowered to revise the schedule in accordance with the comments received from the House of Delegates or from the specialists.

(The amendmnt was carried).

We will now vote on the motion as amended.

(Motion as amended unanimously carried).

DR. PHIFER: I want to extend a vote of thanks to each member of the Committee.

DR. KITTLER: I move that the Secretary send Senator Robert A. Taft a telegram of appreciation for his attitude in opposing socialized medicine and compulsory health insurance.

(Motion seconded and carried).

On motion the House adjourned *sine die* at 3:45.

Original Articles

HERNIATION OF THE INTERVERTEBRAL DISC. A SYSTEMATIZED TECHNIQUE FOR THE INVESTIGATION AND TREATMENT OF LUMBOSACRAL AND LOW LUMBAR LESIONS

I. Joshua Speigel, Major, Medical Corps, A.U.S. (Retired)

Current medical literature is replete with material on herniated intervertebral discs. The purpose of this presentation is not to present anything new in the way of investigation or startling in the way of surgical results. Its sole aim is to discuss the method by which patients with true herniated discs are screened from the numerous patients with low back pain who are admitted to a large army neurosurgical center.

All cases suffering low back pain are sent immediately upon admission to the orthopedic service. Here the patient is examined from the orthopedic standpoint. If there is any suspicion that the patient has a herniated disc, he is transferred to the neurological service.

Here, after thorough investigation including pantopaque studies, the patient is transferred to the neurosurgical service for surgical treatment. The method of investigation follows a specific routine which consists of tabulating the symptoms and signs as outlined in the following worksheet. Many excellent diagnostic tests are in use at present which are not included in the worksheet. As much as possible the diagnostic routine has been stripped of any redundant or overlapping tests, facilitating the rapid arrival at an accurate diagnosis.

1. Name
2. Age
3. Date of onset
4. Number of episodes
5. Without preceding trauma
6. With trauma
7. Location of back pain
8. Radiation of pain to hip, thigh, knee, ankle, heel, great toe, lateral toes
9. Side of radiation
10. Aggravation by coughing and sneezing
11. Aggravation by exercise
12. Paresthesias — location
13. Numbness — location
14. Limp
15. List: degree and side
16. Lumbar lordosis, percentage lost
17. Lumbosacral paravertebral muscular spasm
18. Tenderness to percussion over spine
19. Radiation of pain on percussion over spine
20. Flexion of spine (distance of hands from floor)
21. Lateral flexion (percentage limitation) and resultant pain
22. Hyperextension
23. Sciatic tenderness
24. Naffziger sign
25. Fabere sign
26. Lasegue sign
27. Knee jerk right left
28. Ankle jerk right left
29. Sensory loss
30. Atrophy
31. Weakness
32. X-ray findings
33. Orthopedic complications
34. Spinal puncture
35. Does patient desire operation
36. Pantopaque
37. Surgical findings

2. *Age* — Lumbosacral and lumbar herniated

From the neurosurgical section of the Mayo General Hospital, Galesburg, Illinois. Presented before the Illinois State Medical Society, Post Graduate Conference for Western Illinois, 17 May 1945, Galesburg, Illinois.

discs are not limited to any specific age group. They are most commonly met with in male patients in the physically active age group, most frequently between the ages of fifteen and forty-five. They are, however, encountered in patients ranging in age from ten to ninety and must, therefore, always be borne in mind.

3. *Date of onset* — True "disc cases", unless the first attack is very severe do not generally reach the neurosurgeon, or even seek medical assistance with the first attack. In our series, the average length of time between the initial onset of symptoms and final arrival at a neurosurgical center was three years with the extremes varying between fifteen years and four weeks.

4. *Number of episodes* — The patient with a classical herniated disc syndrome characteristically presents an episodic history. The first episode may last only a week and gradually improve without treatment. The next episode may occur two weeks, two years or ten years later. Each succeeding episode is in general, more severe than the preceding one, until finally the patient is driven to seek medical advice. There are several reasons for the episodic nature of this illness. If the posterior longitudinal ligament is not torn, only thinned out ahead of the herniated disc, (Figure 1) it is quite conceivable that the herniated disc may gradually return to its normal position, with subsidence of symptoms, awaiting another injury to the spine before it again pushes the ligament posteriorly and initiates a recurrence of symptoms.

In those instances where the posterior longitudinal ligament is torn, with actual extrusion of disc material into the spinal canal, (Figure 2) it is conceivable that the herniated material may gradually work its way from one position to another in the spinal canal, on one occasion exacerbating the pain and on other occasions causing remission of symptoms. Each major change in position follows an insult of one type or another to the spine, such as slipping on the ice or lifting a heavy package.

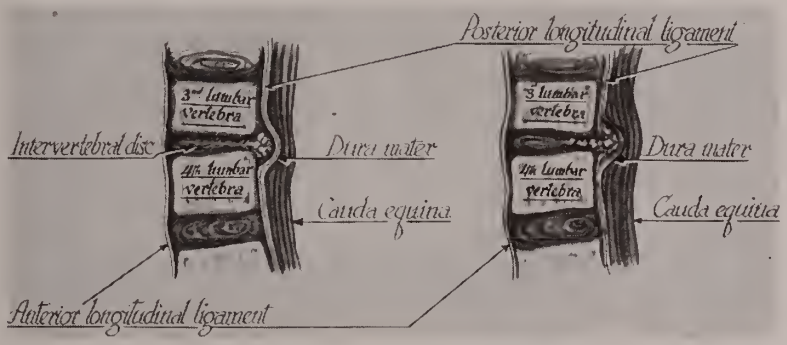


Figure 1 Figure 2

Figure 1: Schematic representation of a disc which has herniated without rupturing the posterior longitudinal ligament or the annulus fibrosis.

Figure 2: Schematic representation of a herniated disc which has ruptured through the annulus fibrosis and the posterior longitudinal ligament.

(Modified after Dandy. Arch. Surg. 19, 660, 1929)

It does not appear likely that remission of disc symptoms can occur as a result of the return of the herniated disc to its normal habitat through the tear in the posterior longitudinal ligament. The reason for this is, that the tear in this ligament is generally too small to readmit the herniated material — although it allowed for its exit by virtue of the heavy expelling force of the two vertebrae crushing together. On the other hand, in the infrequent cases where a large tear in the ligament occurs it is not inconceivable that a remission of symptoms may occur as a result of the slipping back of the herniated disc to its original position.

Another explanation for the episodic nature of this illness is that the spinal nerve on being stretched backwards by the herniated disc slips over it to one or other side and a remission of

symptoms occurs. When the herniated mass moves once more, it may again impinge on the nerve and cause an exacerbation of symptoms.

It is well known, of course, that continued pressure on a nerve will eventually cause it to cease functioning. This may explain a few cases of gradual diminution of pain. If the pressure involves only one nerve root, the neurological deficit may be quite small. If the herniated mass moves again, the entire chain of events may be repeated. In the same line of thought, it is possible that each little additional herniation, may cause an increase of pain to which the nerve gradually accommodates itself and the pain disappears[1]. After a series of such increasing herniations, the nerve can no longer accommodate and the pain becomes continuous[2].

The theory that intermittent edema of the disc may be responsible for the episodic nature of the pain[3] has not been substantiated in our experience.

5. *Without Preceding Trauma* — Approximately half of our cases have history of definite injury preceding the attack. Occasionally a snap in the low back region is felt at the height of the exertion which is followed by the severe pain. The injuries were varied — lifting heavy weights, slipping on the ice and jumping from heights were among the commonest. The other half of these patients had no specific history of injury but many of them stated that after a prolonged period of heavy exertion, such as military maneuvers or a period of hard manual labor, the symptoms were first noticed.

The possibility of herniation of the intervertebral disc as a sequel of spinal puncture with perforation of the posterior longitudinal ligament has been suggested by several authors[4]. We have no such case in our series.

6. *With trauma* — This heading is discussed above.

7. *Location of back pain* — As mentioned above, the first symtom is usually low back pain. This pain frequently precedes, by years, the onset of seiatic radiation. It is felt that the chief cause for the low back pain is actual tearing or stretching of the posterior longitudinal ligament and the annulus fibrosus. It has been pointed out by Roofe[5] that these two structures are plentifully supplied with sensory fibres. Displacement of the herniated disc also causes a change in relationship of the two vertebral bodies and it is possible that this pulls on the ligaments surrounding the facets causing localized pain.

8. *Radiation of pain* — The most frequent sites of radiation of pain are into the affected hip, the postero-lateral aspects of the thigh, knee, leg and ankle. Occasionally the pain is referred to the great toe and occasionally to the dorso-lateral aspect of the foot and the outside toes. This can be explained by the fact that the mass presses on all, or one of the nerve roots of L4, L5, S1 and S2. The pressure irritates the sensory nerves causing an apparent radiation of pain to the area supplied. It has been found in those cases where there is actual pain radiating to the great toe that there is generally a herniation between L4 and L5. In the more frequent cases where the pain radiates to the side of the foot and the lateral toes the usual finding has been a herniated disc between L5 and S1. This is by no means an infallible rule since a herniated disc between L4 and L5 may press on all the above mentioned nerve roots. Occasionally tenderness is present in the posterior muscles of the entire extremity. This may be due to the fact that the sensory fibres going to the muscles themselves are being irritated.

9. *Side of Radiation* — In our series the most frequently involved has been the left side. This is probably just coincidence.

10. *Aggravation by coughing and sneezing* — History of aggravation of the pain by coughing and sneezing is highly significant and generally indicates the presence of a space-occupying lesion, probably extradural lying in the spinal canal. The mechanics of this symptom are relatively simple — the intra-abdominal pressure is raised by coughing, sneezing and straining, forcing blood out of the inferior vena cava, through the lumbar veins into the spinal canal. This increases the circulation in the canal and causes a temporary swelling of all the components in this area. The net result is an increase in the size of the contents of the canal with no increase in the size of the canal. As a result the tear in the posterior longitudinal ligament and the annulus fibrosus is further irritated by the disc pressing upon it, and the nerve root it further irritated by increased pressure of the mass. A concimitant of straining is, of course, increased intracranial pressure. This causes a change in

the relative positions of the herniated disc, the irritated nerve roots and posterior longitudinal ligament with resultant exacerbation of pain.

11. *Aggravation by exercise* — Aggravation of the low back and radiating sciatic pain by certain movements is a characteristic of the herniated disc syndrome. Some patients are most comfortable when standing. Bending forward may cause severe pain as may any sudden movement of the back. The reason for this is that the change of positions or the actual painful positions place a strain on the torn posterior longitudinal ligament, annulus fibrosus and the capsule of the facets — which are all as mentioned above well supplied with sensory nerves.

By a similar process the herniated disc changing its position slightly during exercise, irritates the already sensitive nerve root and causes radiating pain. The observation that flexion of the spine causes the most severe pain usually is explained by the fact that it is this maneuver which stretches the torn posterior longitudinal ligament and also may temporarily force out enough additional disc tissue to aggravate the pain.

12. *Paresthesias — location* — Paresthesias, or altered sensation, are frequently seen early in the disease before actual hypesthesia sets in. They consist of tingling or burning sensations. Occasionally the patient complains of hyperesthesia. The paresthesias are in the same location as the pain and as described in item 7 are due to irritation of the nerve roots. Their location, however, is a better diagnostic beacon than is the pain.

13. *Numbness — location* — The subjective feeling of numbness is in the same distribution as the paresthesias and usually occurs later. Its degree varies with the amount of physiological interruption of nerve function which has occurred. As time goes on and the pressure continues, the interruption of function may become irreversible due to permanent changes in the nerve. The presence of localized areas of numbness is a valuable diagnostic symptom. Its explanation is the same as item 12.

EXAMINATION

14. *Limp* — The patient with a severe herniated disc always favors the involved extremity. When walking, the thigh is not flexed forward to the normal degree and the ankle is not dorsiflexed to the normal degree. Complete extension of the knee is avoided. When standing, the knee and hip are slightly flexed and the foot is plantar flexed. The whole scheme of this protective mechanism seems to be to protect the patient from stretching the irritated sciatic nerve and causing pain. Because of the apparent shortening of the involved side the pelvis is tilted to the opposite side to compensate for it.

15. *List* — Because of the apparent shortening of the involved limb described above, there is frequently seen a list of the entire body to the side of the lesion. Besides this, the patient may have a severe scoliosis with the convexity towards the normal side. This may be due to the voluntary splinting of the lumbosacral paravertebral muscles to prevent painful movement, with more spasm on the involved side pulling the vertebrae down together to produce a scoliosis. Another aspect of this is that the posterior rami of the nerve roots, entering the paravertebral musculature are themselves irritated by the herniated mass. They, therefore, also cause spasm of the muscles on the involved side, resulting in a scoliosis as described above. One must mention, however, that not infrequently for reasons not well known, the convexity of the scoliosis is towards the involved side.

16. *Lumbar lordosis, percentage loss* — The spasm of the paravertebral muscles described above, results, in about 70% of cases in complete or partial loss of the normal lumbar lordosis. This sign is indicative only of a painful lesion in the low back and is not pathognomonic of herniated disc.

17. *Lumbosacral paravertebral muscle spasm* — As explained in item 15, the muscle spasm has a voluntary and an involuntary basis. It is most severe, usually on the involved side. Its severity is sometimes very striking, the muscles being in such spasm as to feel as hard as rock. This sign also indicates a painful lesion in the low back and is not pathognomonic of a herniated disc.

18. *Tenderness to percussion over the spine* —

19. *Radiation of pain on percussion over the spine* — We have found tenderness to percussion over the spines of the two involved vertebrae to be a dependable indication of the level of the lesion. With the patient bending over slightly to separate the lumbar spines, they are gently tapped with a percussion hammer. If a herniated disc is present at the level percussed, pain

will occur in the region and not infrequently will radiate down through the hip, thigh, knee, leg and ankle. The pain in the low back is due to the irritation of the ligaments described in 11 and the radiating pain is, similarly, due to irritation of the nerve root as described in 11. We have found this radiation of pain on percussion over the spine to be a most dependable test in diagnosing a herniated disc.

20. *Flexion of spine (distance of hands from floor)* — The patient is asked to try to touch the floor with his hands keeping the knees extended, and a rough measure of the degree of flexion of the spine is thus obtained without actually measuring the angle. A very dependable finding in herniated disc is diminution of "forward" flexion of spine. The reason for this is described in 11, but besides pain voluntarily limiting flexion, the paravertebral muscular spasm acts as an involuntary splint to reduce movement.

21. *Lateral flexion* — Limitation of flexion to the side opposite to the lesion is a frequent finding in herniated disc. The explanation for this is as described in 11, besides which, the stretching of the irritated sciatic nerve may cause radiation of the pain along the usual site.

22. *Hyperextension* — In general, hyperextension of the back does not cause the patient any significant degree of pain. The reason for this, is, that hyperextension of the back causes a loosening of the torn fibres of the posterior longitudinal ligament and of the annulus so that they are not irritated sufficiently to cause pain. By the same token, the irritated nerve to a minor degree has its tension slightly diminished with the result that radiating pain does not occur.

23. *Sciatic tenderness* — This is not an infrequent finding in herniated low lumbar and lumbosacral discs. It is due to irritation of the involved nerve fibres by pressure of the herniated mass on the nerve root. This tenderness can be elicited by pressing half way between the ischial tuberosity and the trochanter of the affected side. Frequently this tenderness can be elicited all the way down the heel along the course of the sciatic and tibial nerves.

24. *Naffziger sign* — This test is performed by digitally compressing both internal jugular veins for a few seconds. (Figure 3) An efficient way to perform this test is to have the examiner



Figure 3
Technique of Examination for the Naffziger Sign

face the patient's back and compress both jugular veins with the index and middle fingers of each hand on that side. It is advisable to slip a small segment of loose neck skin forward before attempting pressure in order to preclude pulling the skin across the larynx and so interfering with breathing. A more accurate (but more time-consuming) method is to place a blood pressure cuff around the neck and inflate it to a pressure of about 40 mm. of mercury for a few seconds and observe the results.

In the patient with a true herniated disc, the radiating sciatic pain is reproduced by this maneuver to a greater or less degree. The test is most frequently positive in those patients who have a history of aggravation of the pain by coughing and sneezing. Occasionally the pain is not aggravated until the finger is released. (In the standing patient, it is necessary to remember that the pressure may be over the carotid sinus and it may bring on an attack of syncope.) When the jugular veins are compressed, there is a damming back of blood in the head with resultant increased intracranial pressure. The resultant increased pressure is reflected throughout the entire subarachnoid space causing distention of the dura in the involved area, movement of the irritated nerve roots and the onset of pain. It is imperative that the patient be instructed

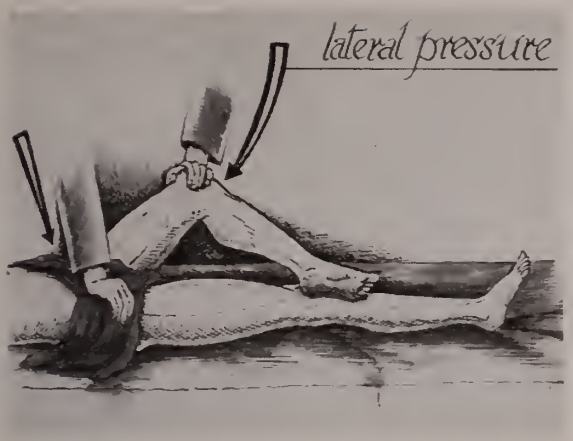


Figure 4
Technique of Examination for the Fabere Sign



Figure 5
Technique of Examination for the Lasegue Sign

not to hold his breath and strain while undergoing the test, since this may complicate the resultant findings.

25. *Fabere sign* — Flexion, abduction, external rotation and extension of the femur is accomplished by placing the heel of the side being tested on the opposite knee and pressing outwards on the knee of the affected side (Figure 4). In a true, uncomplicated, herniated disc syndrome, no pain should result from this test.

26. *Lasegue sign* — This sign is elicited by flexing the thigh up to a right angle and then extending the knee (Figure 5). In any disease where irritation of the sciatic nerve is present, pain will be elicited along the course of the sciatic nerve. It is said by some to be due to stretching of the nerve. It was positive in 100% of our proven cases.

27. *Knee jerk* — This reflex is characteristically diminished in lesions involving the second, third and fourth lumbar nerves. It is best performed by tapping the patellar tendon with the patient sitting and the legs hanging free. Very rarely the reflex is increased due to irritation of the nerve root. Diminution of the reflex is due to pressure on the nerve root which mediates the motor and sensory impulses constituting the reflex.

28. *Ankle jerk* — Diminution or absence of the ankle jerk, when present is a dependable sign of herniated disc between L4 and L5 and between L5 and S1. It was present in over 90% of our surgically proven cases and has been found to be far more common in the herniations at L5 and S1. Loss of this reflex is due to interruption of the reflex tracts through either L5, S1 or S2. The test is most easily accomplished by having the patient stand on his knees on a pillowed chair with the feet projecting backward over the edge of the chair. This precludes, as much as possible, voluntary inhibition of the reflex.

29. *Sensory loss* — This is one of the most dependable signs of a herniated disc and is best ascertained by passing a dull pin from the normal to the anesthetic area. For this test, it is necessary to be well acquainted with the sensory areas innervated by the various dermatomes. Too much space would be taken in this presentation describing these in detail. Suffice it to say that with herniations at L5 and S1, the most frequent sensory loss is over the lateral aspect of the leg, the dorso-lateral and plantar aspects of the foot and the lateral three or four toes. With herniations at L4 and L5, the most frequent sensory loss is over the medial portion of the dorsum and sole of the foot and over the dorsal and plantar surfaces of the great toe.

30. *Atrophy* — Atrophy may be measured accurately at equal distances from fixed levels such as the malleoli and the anterior superior spines. Atrophy results from disuse because of voluntary guarding of the limb, and from actual muscular atrophy due to evanescent damage or permanent destruction of the motor nerve to the

muscle. Occasionally for the latter reason, fibrillations are observed in the muscles mentioned above.

31. *Weakness* — In advanced cases of herniated disc, definite motor weaknesses may be demonstrated, due to prolonged injury to the nerve roots. If severe, actual foot drop may be observed as a result of partial paralysis of the anterior and lateral tibial musculature which are innervated by the lower lumbar and upper sacral nerve roots. Similarly, involvement of these roots may occasionally cause weakness of abduction of the thigh (glutei) and flexion of the knee (hamstrings).

32. *X-ray* — There is no pathognomonic x-ray finding in the disc syndrome but two items are of confirmatory importance. Narrowing of the intervertebral space can be seen both in the antero-posterior and lateral views of the spine. It is not a consistent finding nor does it always indicate the presence of a herniated disc. Frequently the loss of the normal lumbar lordosis is evident on x-ray from a poker-straight appearance of the lumbar spine.

33. *Orthopedic complications* — Three orthopedic involvements are of interest in the treatment of herniated low lumbar and lumbosacral discs — spondylolisthesis, unstable lumbosacral articulation (e.g. sacralization of the last lumbar vertebra or lumbarization of the first sacral) and osteoarthritis of the spine. In all three conditions, one must consider very seriously the possibility of fusing the lumbosacral articulation after removal of the herniated disc. Fusion does not appear to be necessary in the usual type of herniated disc syndrome. The one exception to this rule appears to be the case of long standing low back pain over a period of fifteen or twenty years. This type of case has developed postural difficulties secondary to the pain of the disc and in general such a case is more adequately treated by fusion.

34. *Spinal puncture* — This may be done at the usual level of L3 and L4. In more than 50% of our cases the total protein was elevated above normal. In most cases, this is said to be due to slowing of the circulation in the region of the disc, due to obstruction, with a leakage of protein out of the blood vessels. In the rare cases where a subarachnoid block or a partial block exists below the level of the herniated disc, the elevated protein is due also to the accumulation of metabolic products below the level of the block. If a needle is inserted below the level of the block, a Queckenstedt maneuver will, in these few cases, reveal a complete block. Only one of our cases showed a complete block.

35. *Does the patient desire operation* — It has been our experience that patients in remission, or patients with symptoms which are not severe do not benefit greatly from surgical removal of their herniated discs. Our best surgical results are obtained in those patients whose symptoms are severe and who spontaneously request that surgical treatment be instituted.

36. *Pantopaque studies* — It is our practice to inject 6 cc. of pantopaque into the thecal canal as low as possible. If it is suspected that a herniated disc is present at L5 and S1, the injection is made at L4 and L5 and vice versa. Following the injection, the needle is allowed to remain in the canal and fluoroscopy is carried out. Suitable spot films are taken. The patient is then tilted in such a manner, under the fluoroscope as to bring the column of oil to the needle point. The oil is then removed by aspiration or allowed to drip out. All the oil can generally be removed in this fashion. In interpreting the films, one must look for true defects (Figure 6) in the column of pantopaque rather than the long smooth defects which are most frequently artefact. Swollen nerve roots, a frequent concomitant of herniated disc may also cause a defect in the column of oil. They may be visualized occasionally as hour glass deformities, though these deformities may occasionally be due to central protrusions of the disc. In the more laterally placed herniation, there may be no defect in the column of oil, but the dural sleeve around the nerve root may be obliterated (Figure 7). The subarachnoid space normally ends in the upper portion of the sacrum. This sac may, occasionally, be shortened and end higher resulting in a bizarre pantopaque study. Similarly, it is not infrequent to encounter a congenitally narrow spinal canal.

37. *Surgical findings* — All cases of herniated disc, which were clinically and roentgenographically proven, were operated upon if they desired surgical treatment. Spinal anesthesia was employed in all cases. The type of operation performed is the one first described by Love[6] in



Figure 6

A Classical Defect in the Column of Pantopaque Due to Herniation of an Intervertebral Disc.



Figure 7

Obliteration of the Dural Sleeve around the Nerve Root by a Laterally Placed Rupture of the Intervertebral Disc.

which spines and laminae are stripped subperiosteally of their musculature. The ligamentum flavum is then resected from between the laminae of the involved vertebrae on the affected side. The nerve root and dural sac thus exposed are retracted medially and the herniated disc is brought into view and removed. Frequently the pulpy herniation is seen lying free in the spinal canal. Just as frequently, the herniation is partly in and out of the intervertebral space and must be gently teased out. Occasionally the posterior longitudinal ligament has not torn over the bulging hernia. In such cases a cruciate incision is made in the dome of the herniation and the disc thus removed. In all cases the intervertebral space is searched for loose pieces which are removed. It must be remembered that the anterior longitudinal ligement is not impregnable and it is possible for an instrument to be jammed through it into the inferior vena cava or into the aorta.

Infrequently, it is necessary to resect bone for adequate exposure of the extradural space. It must be remembered, however, that resection of a piece of lamina, close to the midline is not attended with any disability and one should, therefore, never hesitate to resect bone to obtain adequate exposure.

Postoperatively, patients are kept in bed for eight days. They are then allowed up and instructed to gradually start bending the back in all directions until full or almost full range of

motion has been returned. Some authorities[7] leave all their postoperative cases in a back brace for three months. We have not yet found this necessary.

Approximately 170 cases of herniated low lumbar or lumbosacral discs have been admitted to the Mayo General Hospital since January 1945. Of these, 45 or roughly one case in four have been operated upon. The remainder did not fulfill all the necessary criteria for surgery. Of the 45 cases, 30 were at L5 and S1, 12 were at L4 and L5, 2 were at both levels and one was at C7 and D1. Thirty-three cases had immediate complete relief of radiating pain with slight, persistent low back pain which gradually cleared up. Six cases had immediate complete relief of radiating pain with persistent mild low back pain which has not cleared up. Three cases had immediate improvement of radiating and back pain with gradual complete return of the low back pain. Two cases were cured of radiating pain but the low back pain was, if anything, worse following surgery. The high dorsal disc was completely relieved of symptoms. This follow up period is much too short to be significant. It is apparent, however, that the radiating pain is cured much more regularly than is the low back pain.

CONCLUSIONS

1. The signs and symptoms of herniated low lumbar and lumbosacral discs are dependent upon:

a. The presence of a tear in or a stretching of the posterior longitudinal ligament, and in the annulus fibrosus.

b. The presence of a space occupying lesion in the spinal canal.

c. Irritation and partial or complete loss of function of involved nerve roots.

2. Surgical treatment is followed by highly satisfactory results if strict criteria are maintained as indications for operative intervention.

55 E. Washington St., Chicago, Ill.

REFERENCES

1. Bradford, F. Keith and Spurling, R. Glen: The Intervertebral Disc. Charles C. Thomas, 1941.
2. Mauric, G.: Le disque intervertebral, pathologic diagnostic et indications therapeutic, Paris These, Masson-Mayer, 1933.
3. Deucher, W. G. and Love, J. G.: Pathologic aspects of posterior protrusions of intervertebral discs, Arch. Path. 27: 201-211, 1939.
4. Sicard, J. A.: Les rachialgies consecutives, a la ponction lombaire. Bull. Med., Paris 50: 836-839, 1936.
5. Roofe, P. G.: Innervation of Annulus Fibrosus and Posterior longitudinal ligament. Arch. Neurol. and Psychiat. 44: 100-103, 1940.
6. Love, J. G.: Removal of Protruded Intervertebral Discs Without Laminectomy. Proc. Staff Meet., Mayo Clin. 14: 800, 1939.
7. Peet, Max M., Personal communication.

NEW TECHNICS REDUCE DEATH RATE FROM SURGERY FOR CANCER OF LUNG

A Boston physician reports that during the last four years there has been a great reduction in the death rate of patients treated with surgery for cancer of the lung. Over a 15 year period he observed seven deaths in 19 cases of surgery for the first 11 years and one death in 30 cases in the last four years.

Ralph Adams, M.D., from the Department of Surgery, the Lahey Clinic, Boston, writing in the March 2 issue of *The Journal of the American Medical Association,* credits the lowered death rate to improvements in the preparation for operation, in anesthetic administration, effective closure of the infected bronchus, reduction of shock, eradication of infection and prevention of the partial collapse of the lung.

The author says that the frequency of cancer of the lung, compared with all other cancer, is between six and eight per cent. The most susceptible age is between 40 and 50. The male preponderance was 128 to 29, or 81.5 per cent.

Symptoms of wheezing, shortness of breath and coughing with or without pus or blood in the sputum are common signs of cancer of the lung. Hoarseness, pain, fever and loss of weight are less obvious symptoms, but they may occur.

Early cancer of any type is curable, including cancer of the lung, but unfortunately it is often difficult to make an early diagnosis because the symptoms may originally suggest a less dangerous disease of the lung such as asthma, bronchitis or pneumonia.

Dr. Adams followed 157 consecutive cases of cancer of the lung at the Lahey Clinic in the 15 year period ended Dec. 31, 1944. Of the 49 of these patients who underwent surgery, eight died in the hospital. Twenty-three deaths subsequently occurred from recurrence of the disease, while four patients are living with evidence of recurrence. Fourteen patients are alive and well at the present time with a chance for a five year survival. The longest survival to date is nine years, according to Dr. Adams.

Medicine and the Armed Forces

GENERAL KIRK OUTLINES THE REMAINING TASK

The care of the war's wounded is only a part of the medical responsibility of the Army Medical Department, with five thousand neuropsychiatric patients, one thousand tropical disease patients, and three hundred blinded soldiers still in Army hospitals, Major General Norman T. Kirk, Surgeon General of the Army, said in a recent talk at the annual dinner of the Society of Surgeons of New Jersey.

"In the nine centers specializing in hand and plastic surgery, there are 11,500 patients needing an estimated 31,000 operations," General Kirk pointed out. "The plastic surgeons who had been working twelve to fourteen hours daily, six days a week, to carry this load were most of them eligible for separation on points. It was necessary to freeze them in the service. I explained to them why we had to do it. They understood, and they are still doing their job.

"Wherever American soldiers are on duty anywhere in the world, there must be medical officers with them. The flow of battle casualties has mercifully ended. But young men are still subject to all the usual diseases, from colds in the head to acute appendicitis. They are still subject to accidents . . . . . they still must be protected against tropical disease. They still must be protected from the diseases born of wartime devastation and malnutrition. They still must be looked after at staging areas and on their way home. They still must be examined most thoroughly at separation centers, both for their own sakes and for the sakes of the taxpayers who will later foot the bill for errors, as well as for genuine disabilities. Those who will replace them at home and overseas must still be examined at induction centers. Prisoners of war must still be cared for. Displaced persons are frequently medical problems before they are anything else."

In 1940, just after the fall of France, the General said, the United States Army consisted of approximately 250,000 men and the Medical Corps of about 1600 officers, of whom nearly 75 per cent were in the Regular Army. By 7 December 1941 there were 1,613,000 men in the Army and 11,390 officers in the Medical Corps. Although the increment in the Army was chiefly through the Selective Service, that of the Medical Corps consisted entirely of volunteers.

"In short, the Medical Corps can no more be permitted to fall apart, to 'demobilize by demoralization', than can the rest of the Army," General Kirk concluded. "The hardship to be borne by men who must remain in uniform longer than they like is simply an essential part of what has gone before. It cannot be evaded without placing in jeopardy the victory won in combat. It is indispensable to the completion of the job."

★ ★

LEGION OF MERIT TO ILLINOIS DOCTOR

The Legion of Merit was recently awarded to Lieut. Col. Oscar E. Nadeau, Chicago, for outstanding work as medical officer in charge of the Fletcher General Hospital, Cambridge, Ohio. The citation accompanying the award read: "Colonel Nadeau's professional capacity and administrative ability were evidenced by the efficiency and high standards with which the surgical section functioned when peak numbers of

the sick and wounded were hospitalized. From the date of activation to the cessation of hostilities, there was no surgical death recorded at this hospital, an achievement symbolizing the skill, resourcefulness and high level of care Colonel Nadeau provided for patients at Fletcher General Hospital." Dr. Nadeau graduated from Rush Medical College, Chicago, in 1913 and entered the service Oct. 1, 1942.

★ ★

SN-7618 EFFECTIVE ANTI-MALARIAL DRUG

The new anti-malarial drug, SN-7618, which the Army Medical Department played an important part in developing, has been found to be superior in many ways to quinine or atabrine, according to a recent announcement by the Office of The Surgeon General.

Studied in collaboration with the Interservice Board for the Coordination of Malarial Studies, SN-7618 was tested in experiments at Harmon General Hospital, Longview, Texas, and Moore General Hospital at Swannanoa, North Carolina, in addition to some overseas theaters of operations.

Designed to obtain information on the value of the drug in controlling the symptoms and fever occurring in acute attacks of malaria, these studies included the observation of more than 600 malaria-stricken soldiers, who were administered different amounts of the drug in from one to seven days. When notations had been made of symptoms such as the passing of the fever and the disappearance of malarial parasites from the blood stream, the patients were kept in the reconditioning section to determine the possibilities and time interval for relapse.

Comparisons were made of the results with those obtained in similar studies of atabrine, quinine and other new drugs. It was found that one day's treatment with SN-7618 promptly controlled fever and other symptoms and that the parasites rapidly disappeared from the blood.

Observation periods of four months showed that 75 per cent of the men tested suffered relapses. Though this number is similar to that found in experiments with quinine and atabrine, the interval between attacks was found to be longer when SN-7618 was used. Patients soon acquired a preference for the drug because of its rapid action, which permitted them to leave the wards within two or three days.

Though SN-7618 is considered superior to other anti-malarial drugs in that it does not discolor the skin, upset the stomach, or cause a buzzing in the ears, it is not a one-treatment cure for vivax malaria. Weekly doses of the drug can be taken to avoid relapse after an acute attack, but upon discontinuation of the treatment further relapses may occur.

SN-7618 was so named because it was the 7618th drug tested in the four-year program sponsored by the Committee on Medical Research. The program was financed by the Office of Scientific Research and Development.

★ ★

ERECTION OF NEW ARMY MEDICAL LIBRARY BUILDING PLANNED

Plans which are now under way for the erection of a new building for the Army Medical Library will be furthered this spring when a request for funds will be included in the War Department estimate for the fiscal year 1947, scheduled to come before Congress.

The building, which architects estimate will cost $10,000,000, will be located on land named as part of the proposed postwar development of East Capitol Street from the National Capitol eastward to Anacostia.



Tuberculosis can be controlled and the fight against it must be continued until it is controlled. The American people cannot be complacent about a disease which exacts such a tragic and needless toll of lives. Today, in particular, it is inexcusable to permit disease to undermine the strength of our people when all their energy is needed in the building of a better world. Harry S. Truman.

Case-finding in a hospital finds tuberculosis — the first essential in any tuberculosis program. It provides the hospital with a knowledge of all of the tuberculosis within its walls. It improves the hospital competency and removes a hazard to patients and personnel — the unrecognized case. It is bound to improve community health. W. H. Oatway, Jr., M.D., NTA Bull'n., Nov. 1945

News of the State

PERSONALS · COMING EVENTS · MARRIAGES · DEATHS

BOONE COUNTY

Everett F. Dettman has resumed practice of medicine in Belvidere after three years and four months in the army medical corps.

CHAMPAIGN COUNTY

The Champaign County Medical Society held its regular monthly meeting March 14th at the Champaign Country Club. Dr. Archibald L. Hoyne, Professor of Pediatrics, University of Illinois, was the speaker discussing "Recent Advances on the Treatment of Contagious Diseases."

R. J. Brennan has opened an office for the practice of medicine at Philo.

CRAWFORD COUNTY

The regular monthly meeting of Crawford County Medical Society was held at the Robinson Hospital February 14th.

COOK COUNTY

The second Richard H. Jaffe' Leeture will be delivered April 9 at the Palmer House by Dr. Wilton M. Krogman, associate professor of anatomy and physical anthropology, University of Chicago School of Medicine, on "The Skeleton in Forensic Medicine."

Dr. Raymond B. Allen, executive dean of the Chicago colleges of the University of Illinois and dean of the medical school, has resigned to become president of the University of Washington, Seattle, effective September 1. Dr. Allen graduated at the University of Minnesota Medical School, Minneapolis, in 1928. Before joining Illinois he was dean of the Wayne University College of Medicine, Detroit. He became executive dean of the Chicago colleges of the university in 1939 and dean of the medical school in 1943.

J. Lester Wilkey, physician on the staff of County and Grant hospitals, was selected to head the new slate of officers of the Dr. Jerome D. Solomon Memorial Research foundation, which is affiliated with Hektoen institute.

Eight scientists from the University of Chicago have been appointed by the National Research Council to develop a co-ordinated program of research for the American Cancer Society in its all-out campaign against the second most frequent cause of death. Those appointed: Dr. Charles B. Huggins, Dr. Allan Kenyon, Dr. Thomas Gallagher, Dr. Harold C. Urey, Dr. Raymond E. Zirkle, Dr. Wm. Bloom, and Dr. Earl A. Evans, Jr.

David L. Slight, noted Chicago psychiatrist, has accepted appointment as acting superintendent to set up a new State Division of Veterans Rehabilitation Centers.

Col. Sydney P. Waud, now on terminal leave after more than five years' service has been named a consultant physician at Hines Veterans' hospital and a member of the staffs of the Northwestern university medical school and of Passavant hospital.

Charles Huggins, professor of surgery at the University of Chicago, has decided not to accept the chair of urology at the Johns Hopkins Medical School, because his research work at Chicago "has reached a point where I'm unable to leave it."

Frank W. Blatchford, Jr., has been appointed assistant physician on the Evanston Hospital Staff.

I. H. Chilcott, was elected president of the Evanston Y.M.C.A. by the board of directors at their annual meeting in February.

Word has been received of the coming marriage in June of R. W. Kerwin and Elaine Rietz of Flossmore, Illinois.

A meeting of the Institute of Medicine of Chicago was held on March 22, at the Palmer House. This was the twenty-second Ludvig Hektoen Lecture of the Frank Billings Foundation of the Institute of Medicine and the speaker S. Burt Wolbach, Shattuck Professor of Pathological Anatomy, Harvard Medical School gave an illustrated lecture on "Vitamin A Deficiency and Excess in Relation to Skeletal Growth."

The fifth Edwin R. Kretschmer Memorial Lecture was delivered on April 26, at the Palmer House by Dr. Charles A. Doan, Dean and Director of Medical Research, Ohio State University College of Medicine, on Marrow Hematopoieses (Synthetic Folic Acid) and Splenic Hematopenia: Experimental and Clinical Studies.

A one-day institute, with nationally-known psychiatrists and psychologists discussing the "Care of the Mentally Ill in Illinois" was conducted in Chicago on March 15 by the Illinois Society for Mental Hygiene.

At the dinner meeting in the evening Dr. Franz Alexander, director of the Chicago Institute of Psychoanalysis spoke on "Mental Hygiene in a World of Atomic Energy."

The following doctors have been discharged from the service and returned to private practice: E. Zencka, Vaughn A. Avakian, H. S. Feeney, H. Paolozzi, Joseph N. Rappaport, Joseph T. Twohey, and C. M. Rice.

Samuel H. Kraines gave two lectures and conducted ward rounds on Psychotherapy before the University of Minnesota College of Medicine on March 14th and 15th.

M. A. Perlstein addressed the Utah Society for Crippled Children on the subject of "Handicapped Children" in Salt Lake City on March 29th. On April 3rd and 4th he participated in an institute for Cerebral Palsy sponsored by the California State Society for Crippled Children and the Crippled Children's Society of Los Angeles County. At this meeting he spoke on "Overall Program of Care, Education and Treatment of the Cerebral Palsied Child."

S. M. Goldberger recently gave a talk on "Health of the School Child" before the Parent Education Class of the Berry Parent Teacher Association, Chicago.

Emmet Keating gave a talk on "Who Needs a Doctor" before the City Club Forum of Chicago on March 11.

Warren H. Cole spoke to the Winnebago County Medical Society on March 12 on "Intestinal Obstruction".

Archibald L. Hoyne addressed the Champaign County Medical Society on "Recent Advances on the Treatment of Contagious Diseases" on March 14.

Sidney A. Portis, attending physician in medicine at Michael Reese Hospital, was elected new president of the medical staff of the hospital at the annual staff meeting in January.

Walter G. Maddock, associate professor of surgery at the University of Michigan Medical School, Ann Arbor, has accepted a similar position at Northwestern University Medical School.

George O. Whitecotton, superintendent of the University of Chicago Clinics for the past seven years, has been appointed medical director of the Alameda County Institutions, Oakland, Calif., to succeed the late Dr. Benjamin W. Black. In addition to his activities as medical director of all county institutions, Dr. Whitecotton will serve as superintendent of the 500 bed Highland-Alameda County Hospital, Oakland, where he spent the years 1932-1936 as intern, senior resident and administrative assistant.

Lawrence J. Sykora has become associated with F. B. Deardorff of Berwyn.

Lt. Col. P. J. Ross is the last of LaGrange's "war doctors" to return to civilian practice. He expected to reopen his offices the first of March.

F. Steigmann has returned from active service and resumed his former duties at Cook County and Hektoen Institute.

The regular meeting of the Chicago Urological Society was held March 28th. The Clinical meeting was held at the Cook County Hospital in the morning and the evening program held at the Palmer House. Leander W. Riba gave a paper on "Excision of Internal Spermatic Vein for Varicocele" and Frederick Lieberthal spoke on "War Injuries of the Kidney and Ureter" giving a report of 58 cases observed in a general hospital in the Mediterranean Theatre.

DE KALB COUNTY

Sol Scholnik has returned to Genoa to resume the practice of medicine.

DU PAGE COUNTY

Harry Kinne and his son Abram Kinne have been discharged from the armed service and expect to resume the practice of medicine soon.

EDGAR COUNTY

E. E. Terrell has returned to Paris to resume his practice of medicine.

GREENE COUNTY

F. Carl Walker, formerly of Chicago, has opened an office for the practice of medicine in Roodhouse.

At the March meeting of the Green County Medical Society Dr. Chas. D. Ehlert of Alton gave a talk on "Acute Urinary Retention".

HENRY COUNTY

Captain C. G. Kurtz expects to resume the practice of medicine in Kewanee in the near future.

At the quarterly meeting of the Henry County Medical Society held in February, Dr. Walter R. Tobin of Chicago discussed "Differential Diagnosis of Organic Heart Disease."

F. J. Stewart has returned to the practice of medicine in Kewanee after having been discharged from the navy.

W. F. Spencer of Geneseo celebrated his 82d birthday on March 8. Dr. Spencer has practiced medicine in Geneseo for 55 years and still maintains his regular office hours.

JACKSON COUNTY

Major W. C. Scott, Elkville has returned home from service and expects to resume his practice of medicine soon.

Leo J. Brown has returned to Carbondale and announced the opening of his office of the practice of medicine.

The following doctors have returned to Murphysboro to resume the practice of medicine: Dr. Wm. D. Mohlenbrock, John Winn, A. R. Esposito, H. H. Rodewald, James A. Weatherly and A. J. Petrazio. With the return of these men St. Andrew's staff is at its pre-war status.

John S. Lewis is on terminal leave and has announced he will reopen his office in Murphysboro and resume his practice of medicine and surgery.

JEFFERSON COUNTY

Leo J. Eschelbacher, Mt. Vernon, has returned from service and reopened his offices.

KANE COUNTY

C. L. Gardner and Otto L. Siewert have returned to Aurora and will resume the practice of medicine.

Norman J. Schreiber has opened offices in St. Charles for the practice of medicine.

LAKE COUNTY

Amos Bratrude has opened his office in Antioch to resume the practice of medicine.

LA SALLE COUNTY

The La Salle County Medical Society held its regular meeting in February in La Salle. The speaker of the evening was Melvin H. Knisly, whose subject was "The Physiological Changes of the Blood in Disease."

C. E. Rathbun has announced his intention of opening offices in Mendota for the practice of medicine.

LEE COUNTY

Norris J. Heckel of Chicago, was the principal speaker at the joint meeting of the Lee and Whiteside county medical societies in Dixon in February. Dr. Heckel discussed "Infections of the Genito-urinary Tract". Dr. Philip Hall, the second speaker discussed "Anesthesia, Indications, Contra-indications and Dosage."

LIVINGSTON COUNTY

Members of the Livingston County Medical Society returning recently from war service were welcomed at a dinner meeting of the society in Pontiac in February.

MC DONOUGH COUNTY

Eric E. Wisshack has resumed the practice of medicine having opened offices in Macomb.

The McDonough County Medical Society held its regular meeting in Macomb on March 8th. At this meeting Dr. B. D. Jenkins was presented with a membership in the 50 Year Club of the Illinois State Medical Society by Dr. C. P. Blair of Monmouth, Councilor of the 4th District.

MADISON COUNTY

Lt. Commander F. E. Wilson has returned from service and expects to resume his medical practice in Highland.

MACON COUNTY

At the February meeting of the Macon County Medical Society, Newel C. Gilbert of Chicago spoke on "Treating Coronary Thrombosis".

Chester T. Johnson, formerly of Madison, Wisconsin, has entered the office of Dr. Thomas

Lahness of Decatur and will take complete charge of the practice, inasmuch as Dr. Lahners plans to farm.

MACOUPIN COUNTY

F. E. Anspaugh has resumed his practice in Virden after serving three and a half years in the army.

MADISON COUNTY

Hubert L. Allen and Frank A. Morrison announce they will be associated for the practice of obstetrics and gynecology in Alton.

MONROE COUNTY

The Monroe County Medical Society held its regular meeting in February at Columbia. Dr. C. F. Alderson discussed "The Differential Diagnosis of Acute Pelvis Diseases."

MORGAN COUNTY

Residents of Chatham and surrounding community gathered at the Community center to honor Dr. M. M. Bradley, practicing physician for more than 52 years, on the occasion of his 82nd birthday.

R. Norris has resumed the practice of medicine in Jacksonville with his former associates Drs. F. A. Norris and Harold Norris, after having completed more than three years of active duty as commander in the U. S. Naval Reserve.

OGLE COUNTY

R. F. Dearborn has reopened his office in Byron having been discharged from the armed forces.

PEORIA COUNTY

Eldred V. Thiehoff, Lansing, recently director of the bureau of local health service, Michigan State Department of Health, has been appointed health commissioner of Peoria, succeeding the late Dr. Sumner N. Miller.

The Peoria Medical Society at a dinner meeting held in February at the Jefferson Hotel in Peoria heard Dr. Roland M. Klemme, clinical professor of neuro-surgery, St. Louis University, discuss "Parkinson's Disease".

The following Peoria doctors have returned from military service and resumed the practice of medicine: Elliot P. Burt, Morton J. Freedman, Leonard H. Harris, Harry C. Vesely, and Harry A. Warren.

A clinic for crippled children was held in Peoria in February by the University of Illinois Division of Services for Crippled Children in cooperation with the Peoria County Medical Society, the Crippled Children's Co-ordinating Committee of Peoria, Inc., the Peoria Rotary Club and the Peoria Visiting Nurse Association. Physically handicapped children from Peoria, Putnam, Fulton, Marshall, Mason, Mercer, Stark, Tazewell, Woodford, Bureau, Livingston and Menard counties received the benefit of the specialized clinic services.

PIKE COUNTY

S. B. Peacock of Pittsfield rounded out 50 years as a practicing physician of Pike county, March 3.

RANDOLPH COUNTY

The physicians of Randolph County Medical Society held a scientific meeting in February at Sparta. Guest of honor and speaker for the evening was Dr. W. C. Scrivener, East. St. Louis, who presented "Common Gynecological and Obstetrical Problems."

ROCK ISLAND COUNTY

Hubert S. Houston, formerly of DeKalb, has been appointed full-time medical director and superintendent of the Rock Island county tuberculosis sanitarium.

Captain Francis X. Meier has resumed his practice of medicine at his old office in Milan.

John A. Layman has been separated from the army medical corp and resumed his practice in Port Byron.

Jos. G. Gustafson has returned to Moline after nearly four years in service and will be associated with W. H. Myers in the Myers clinic at Coal Valley.

Ben K. Williamson has announced the opening of his office in Moline after forty-two months in the army.

The Rock Island County Medical Society held its regular meeting March 12 at St. Anthony's Hospital. Guest speaker was Dr. Ralph E. Dolkart, of Northwestern University who discussed "Clinical Aspects of Penicillin Therapy."

SANGAMON COUNTY

Governor Green has appointed G. Howard Gowen chief of the cancer control division of the state.

A. C. Buchmann and F. P. LaFata have announced the opening of offices in Springfield for the practice of medicine.

R. J. Malmberg announced the opening of temporary offices in Divernon having just returned from military service.

SHELBY COUNTY

The following officers were elected to serve for the year in the Shelby County Medical Association which met in February: H. H. Pettry, Cowden, President; Henry Turney, Shelbyville, Vice President; Dr. Hulick, Shelby, re-elected Secretary and Treasurer.

STEPHENSON COUNTY

Carl M. Becker has been elected president of the Stephenson County Medical Society, W. Edward Rideout, vice president; and D. J. Doelker, secretary-treasurer.

VERMILION COUNTY

James McKibben has closed his Westville office and is spending his full time in Danville.

WAYNE COUNTY

Lowell Stevens has returned to Covington and will resume the practice of medicine which was interrupted when he entered the service four years ago.

WHITSIDE COUNTY

Norris J. Heckel of Chicago and Phillip V. Hall were the speakers at a joint meeting of the Lee and Whiteside County Medical societies' meeting held in Dixon in February. Dr. Heckel spoke on "Infections of the Genito-Urinary Tract" and Dr. Hall discussed "Anesthesia, Indications, Contra-Indications and Dosage."

J. D. Hollander, formerly of East St. Louis, has announced the opening of an office in Morrison for the practice of medicine.

WILL COUNTY

Phillip McGinnis, Jr. has opened an office in Joliet for the practice of medicine.

N. Lucia has been discharged from the army and is going to resume the practice of medicine and surgery in Braidwood.

WINNEBAGO COUNTY

Burt Canfield and John W. Sheagren have returned to Rockford to resume the practice of medicine after several years of service. They are both associated with the Canfield clinic.

At the March Meeting of the Winnebago County Medical Society, Warren H. Cole, Chicago, discussed "Intestinal Obstruction".

E. H. Quandt of Rockford who served as a major in the army medical corps during World War II, addressed a noon luncheon of the Winnebago County Medical Society. He spoke on experiences in the treatment of violent injuries.

D. F. Loewen of Decatur was elected president of the Illinois Trudeau Medical Society at their February meeting held in Rockford. C. K. Petter, of Waukegan, was elected president-elect; K. G. Bulley, Aurora, vice president, and L. L. Collins, Ottawa, secretary-treasurer.

MARRIAGES

Herman L. Kretschmer to Mrs. Marion Ellen Hicks, both of Chicago, March 3.

Walter W. Hamburger, Jr., Chicago, to Miss Ruth C. Kraft of Hackensack, N. J., January 7.

DEATHS

F. Herbert Bartlett, Muskegon, Michigan. Tufts College Medical School 1919. Was first medical director of the Livingston County Sanatorium. Died of injuries received in a fall at his home, January 25th. Age 52.

Frank Spooner Churchill, Bass River, Cape Cod, Mass., retired; Harvard Medical School 1890. Former professor at Rush Medical College and ex-chief of Children's Memorial Hospital. Age 82.

David A. Horner, Chicago; Rush Medical College, Chicago, 1908. Assistant professor of obstetrics and gynecology at the Northwestern University Medical School. Died November 8, 1945. Age 61.

Mary O. Hoyt, Chicago. Hahnemann Medical College and Hospital 1894. Served as secretary of the old board of recommendations (now the placement bureau) of the University of Chicago. Died March 3rd. Age 79.

Robert A. Lamb, Chicago. Loyola University School of Medicine 1926. Died February 18. Age 49.

Richard J. Lambert, St. Charles; Bennett Medical College 1907. Died March 5th. Age 72.

Charles F. Read, Elgin; Rush Medical College 1901. Superintendent of the Elgin State Hospital since 1930. Past president of Chicago Neurological society and of the Illinois Psychiatric society. Died March 11. Age 69.

Frederick J. Smith, Kankakee; Miami Medical College, Cincinnati, 1905. Formerly assistant physician in neuropsychiatry at the Watertown State Hospital in East Moline, on the staff of the Kankakee State Hospital. Died October 4. Age 65.

Raphael Raymond Sprafka, Chicago; Northwestern University Medical School, Chicago 1937. Died of multiple fractures incurred in an airplane crash while in military service. Died December 4, 1944. Age 33.

Walter Volke, Chicago; University of Chicago School of Medicine 1939. Died October 5. Age 37.

Rachelle S. Yarros, La Jolla, Calif., retired, Woman's Medical College of Pennsylvania, 1893. Was an associate of Jane Addams and established the first premarital and marital consultation service under the Social Hygiene League here. Died March 17th. Age 76.

P. R. N.

The Jocular Jingles of C. G. F.

by

Charles G. Farnum M. D.
Peoria, Ill.

ANONYMOUS

Some years ago we wrote a clever rhyme,
A cherry, merry rhyme we thought,
'Twas published in our column at the time
And only meagre comment brought.

A bold anthologist compiles a tome,
Not wholly bad it seems to us,
And there our rhyme has found an orphan's home
For it is called, Anonymous.

I now am seeking said anthologist
All quietly and without fuss;
I have a half a brick in either fist
And each one is Anonymous.

THE VITAMINS

We now have most wonderful vending machines
To give what you need of the vitamins;
We supply you through skill and most
infinite pains
All your vitamin needs without using
your brains.
This machine is just a honey,
All you do is drop in money,
And you get a very potent little pill;
It will promptly pep and speed you,
It will build you up and feed you,
It will quickly cure your every ache and ill.

With diseases neatly listed
You can never get things twisted,
You can read your symptoms, get the pill
you need.
For the frugal and the thrifty
Our machine is very nifty,
With an alphabetic list to give it speed.

For example —
A will cure your Adenoids, Agranulocytosis,
Asthma, Anthrax, Athletes-foot, Arterio-sclerosis,
Azotorrhoea, Aneurysm and Anaemia,
Amoebiasis and Apoplexy, Anoxemia,
Anaphylaxis, Aphonia, Appendicitis,
Ascariasis, Ataxia and Aortitis,
Acromegaly, Achylia and Adioposis,
Alopecia, Aphasia and Acidosis,
Abscess, Aspergillosis, Angina, Adenoma,
Adenitis, Amyotonia, Angioma,
Addison's Anuria and Actinomycosis,
Anorexia, Arthritis, Acne, Athetosis.

From A up to K and the ones in between,
They all may be had from our vending machine;
It supplies them all wrapped in a neat little packet
And we loudly deny that the game is a racket.

GOURDS

Recently I attended an exhibit of gourds
And was surprised to see the joy it affords
Those who raise them
And display them and praise them.
They dissertate on their color, topography and variety,
As though they were something indispensable to modern society.

It is a bit difficult to realize
The wide variety in shape and size;
Some are exceedingly small,
While others, on end, are several feet tall.
One sees those that are gnarled or knobby or smooth or crinkled or rough
Or squatty or wide or thin or soft or tough.
The prevailing colors are green or tan, though some are yellow or brown or orange or the deeper shades of red
And when one shakes an old, ripe one something rattles in its head.

I think no one disputes
That gourds possess about four outstanding attributes.
First, their wide variety in size, shape, consistency, color and contour;
Also, by and large, they are about as utterly useless as anything in the vegetable kingdom that one might procure;
Furthermore it is my painful duty
To record the observation that very few possess any semblance of beauty;
Also it may be said
That when agitated rattling sounds emerge from the head.

So with these attributes in mind, viewing and contemplating gourds reminds me gaily
Of many of the folks I meet up with daily.

CYINICAL CINQUAINS.

When hives
In crops come through
And everywhere a patch
About the only thing to do
Is scratch.

PANTS

There are certain events in this valley of strife
That provide our starved souls with a thrill
For they serve us as landmarks the rest of our life
In this sphere of monotonous drill.

But of all such events that will raise a man's hope
And that no other thing quite supplants,
For it gives a sick man such a boost up the slope,
Is the day he gets back into pants.

"What are the MAGIC WORDS?"

No magic words, no magic wand can improve a cigarette. *Something more tangible is needed.*

PHILIP MORRIS superiority is due to a different method of manufacture, which produces a cigarette *proved* definitely less irritating to the smoker's nose and throat.*

Perhaps you prefer to make your *own* test. Many doctors do. There is no better way to prove to your own satisfaction the superiority of PHILIP MORRIS.

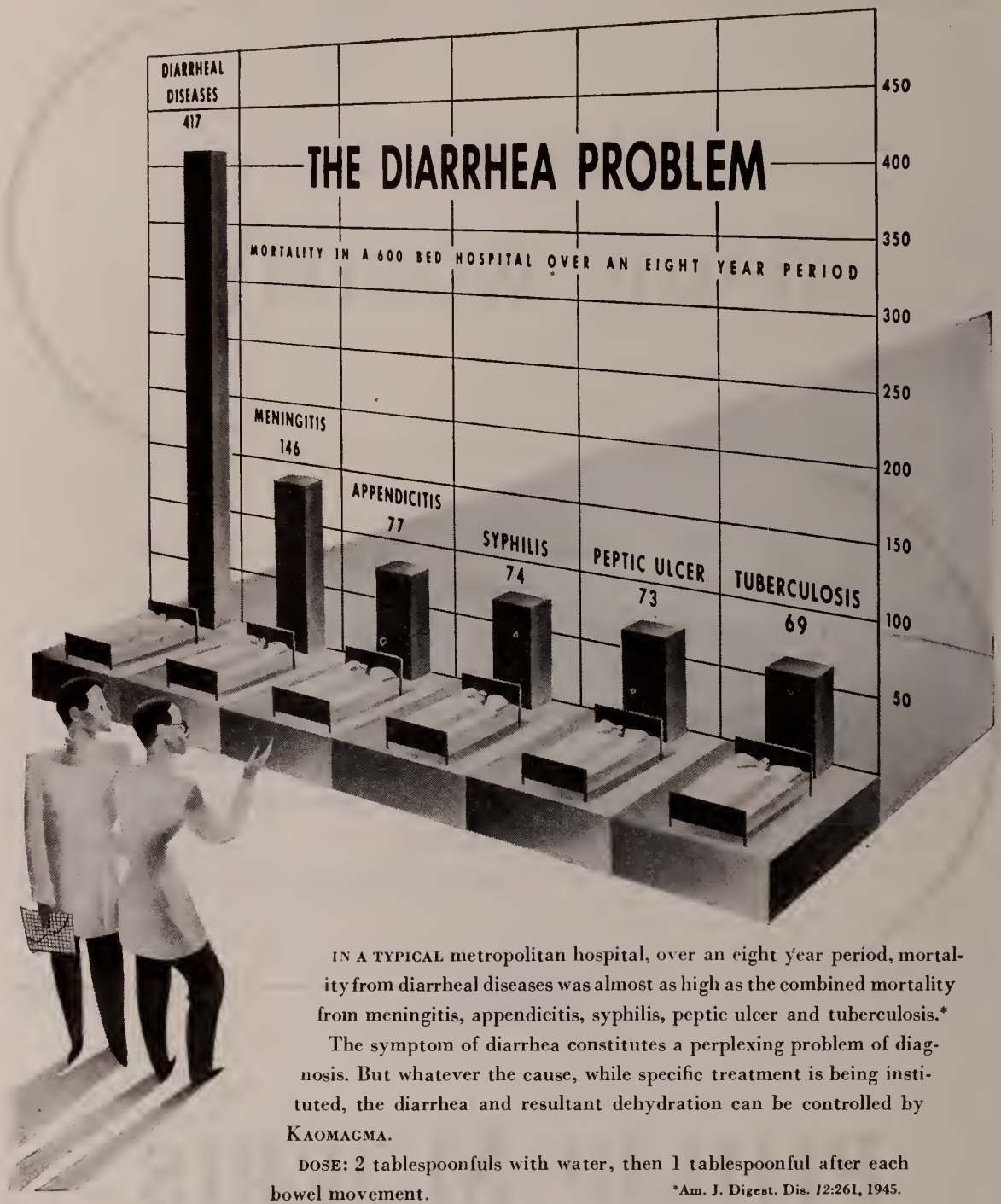
* *Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154*
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60



PHILIP MORRIS

PHILIP MORRIS & CO., LTD., INC.
119 FIFTH AVENUE, N. Y.

TO PHYSICIANS WHO SMOKE A PIPE: We suggest an unusually fine new blend—COUNTRY DOCTOR PIPE MIXTURE. Made by the same process as used in the manufacture of Philip Morris Cigarettes.



IN A TYPICAL metropolitan hospital, over an eight year period, mortality from diarrheal diseases was almost as high as the combined mortality from meningitis, appendicitis, syphilis, peptic ulcer and tuberculosis.*

The symptom of diarrhea constitutes a perplexing problem of diagnosis. But whatever the cause, while specific treatment is being instituted, the diarrhea and resultant dehydration can be controlled by KAOMAGMA.

DOSE: 2 tablespoonfuls with water, then 1 tablespoonful after each bowel movement.

*Am. J. Digest. Dis. *12*:261, 1945.

"First we must check that DIARRHEA"

KAOMAGMA

REG. U. S. PAT. OFF.

A Palatable Emulsoid of Aluminum Hydroxide Gel and Colloidal Kaolin

SUPPLIED in bottles of 6 and 12 fl. oz.

Wyeth

REG. U. S. PAT. OFF.

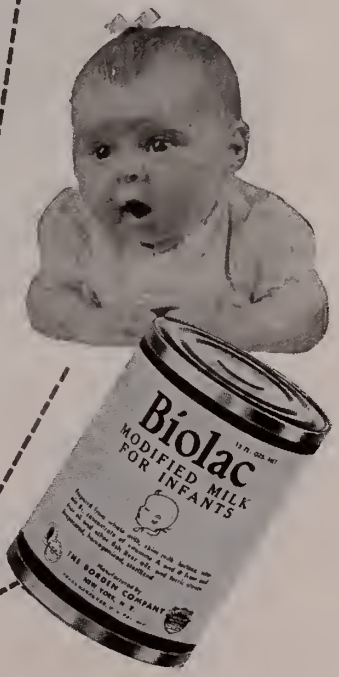
WYETH INCORPORATED • PHILADELPHIA 3 • PENNA.



Saved...by its foundation!

A strong foundation saved the Cathedral of Cologne in ground-shaking bombing assaults of World War II . . . and a strong nutritional foundation laid down in infancy will likewise help to protect health and strength in years to follow, against health-destroying assaults of disease. • BIOLAC furnishes among other essential nutrients the valuable proteins of milk, an outstanding source of all the indispensable amino acids . . . the prerequisite building blocks of strong tissues. • BIOLAC is bacteriologically safe...convenient...economical...readily available.

BORDEN'S PRESCRIPTION PRODUCTS DIVISION
350 MADISON AVENUE, NEW YORK 17, N. Y.



Biolac

The foundation is the thing

ACCEPTED AMERICAN MEDICAL ASSN

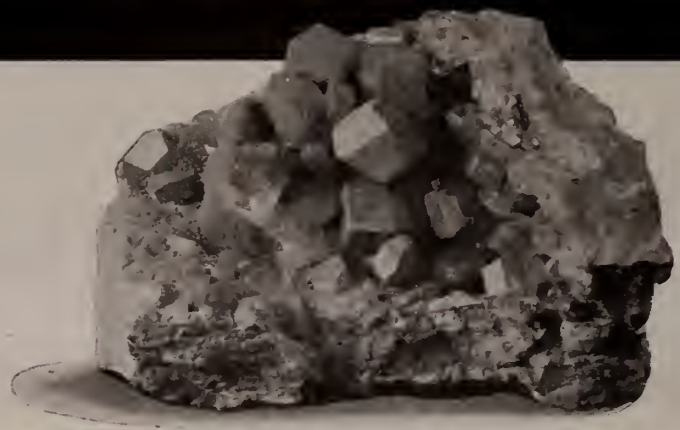
Biolac is a liquid modified milk, prepared from whole and skim milk with added lactose, and fortified with thiamine, concentrate of vitamins A and D from cod liver oil, and iron citrate; only ascorbic acid supplementation is necessary. Evaporated, homogenized and sterilized. Biolac is available in 13 fl. oz. tins at all drug stores.

Quickly prepared . . . easily calculated: 1 fl. oz. Biolac to 1½ fl. oz. water per lb. of body weight.

HYDROSULPHOSOL

Provides all 9 desired requisites as a superior therapy in thermal, acid and caustic burns.

Provides for mechanical exclusion of air at site of burn • Insures prompt relief of pain • Aids in abating burn shock • Bacteriostatic influence • Non-toxic effect • STIMULATES TISSUE REPAIR • Rapidly reduces inflammation and edema • Results in absence or marked reduction of scar tissue • Tends to shorten convalescent period.





HYDROSULPHOSOL is a true solution of sulfur bearing compounds resulting solely from the reduction of flowers of sulfur by a catalytic process. In aqueous solution, it is capable of rapidly releasing its high concentration of sulfhydryl ion (-SH radical) in such form as can be effectively utilized by the body in the synthesis of sulfur-containing amino acids . . . functionally active in cell stimulation and directly related to tissue respiration and repair.

Unlike the sulfa group and many other sulfur compounds, Hydrosulphosol is non-toxic when administered orally or topically applied in heavy concentrations, and will not result in damage to liver and kidney function.

Reprints of scientific papers by authoritative investigators available on request.

AVAILABLE FORMS

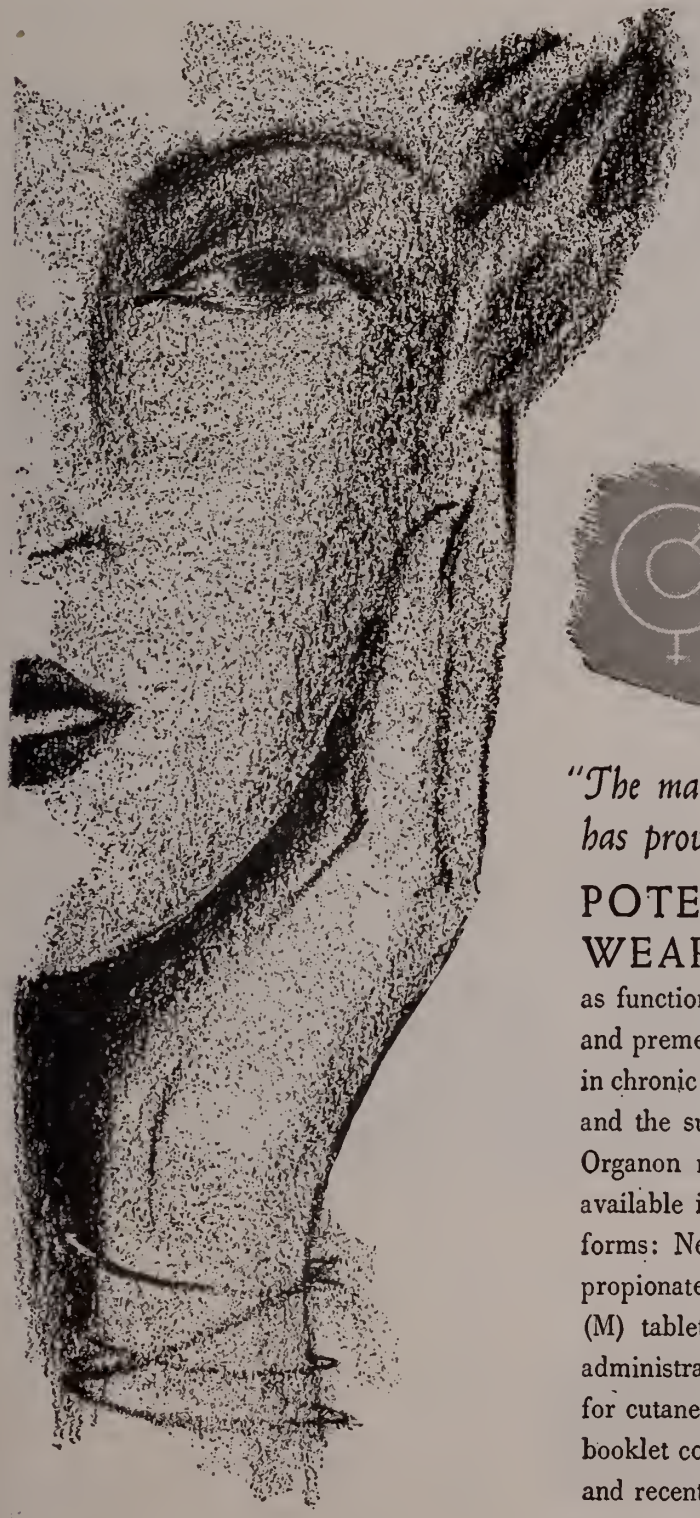
AQUEOUS SOLUTION:
Bottles of 8, 4 and 1 fluid ounce.

OINTMENT:
Jars of 1 lb. and 1 oz.

•

ORDER TODAY through your surgical or hospital supplier.

Distributed by
REES-DAVIS DRUGS, INC.
MERIDEN CONNECTICUT



"The male sex hormone, testosterone, has proved to be a

POTENT GYNECOLOGIC WEAPON"* in such common disorders as functional uterine bleeding, dysmenorrhea, and premenstrual tension. It is also effective in chronic cystic mastitis, frigidity, endometriosis, and the suppression of lactation. The Roche-Organon male hormone preparations are available in three convenient, economical dosage forms: Neo-Hombreol ampuls (testosterone propionate) for parenteral use, Neo-Hombreol (M) tablets (methyl testosterone) for oral administration, and Neo-Hombreol (M) Dosules for cutaneous application. Write for our new booklet containing up-to-date dosage schedules and recent references on the use of male hormone therapy in gynecologic disorders.

ROCHE-ORGANON, INC. • NUTLEY 10, N. J.

NEO-HOMBREOL

'Roche-Organon'

A. E. Rakoff, *M. Clin. North America*, 29:251, 1945



In Eczema

A CLEANER APPROACH PERMITTING OF Continuous Therapy

WHILE tar has been long employed in the treatment of eczema, the drawbacks attending its use were usually more annoying than the disease itself. Unsightly, soiling to skin and clothing, and of unpleasant odor, crude tar with its objectionable features discouraged patient cooperation and frequently defeated the aims of therapy. With Tarbonis, tar therapy assumes a new high in efficacy and cosmetic appeal. Odorless, colorless, entirely free of staining properties, Tarbonis retains all the therapeutic properties of tar. Its use in eczema, including the atopic and infantile forms, is followed by prompt relief of subjective discomfort, and by rapid resolution of the lesion itself. Thus *effective* therapy may be instituted; application every few hours becomes a practical possibility, since following its application, it "vanishes" from the skin, leaving its active ingredients in intimate contact with the lesion, thus avoiding soiled clothing and bed linen.

TARBONIS

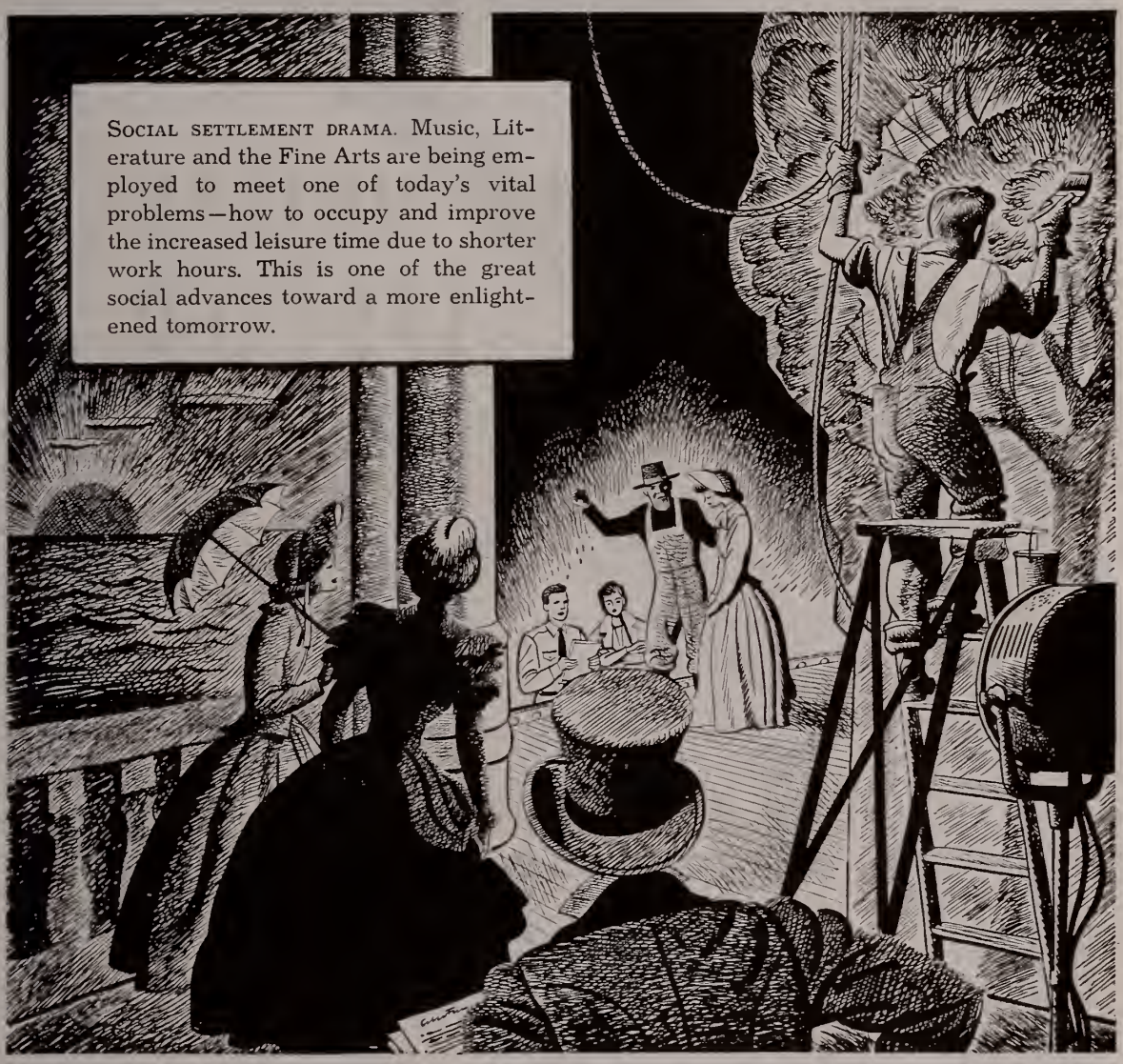
REG. U. S. PAT. OFF.

THE TARBONIS COMPANY

4300 Euclid Avenue, Cleveland 3, Ohio

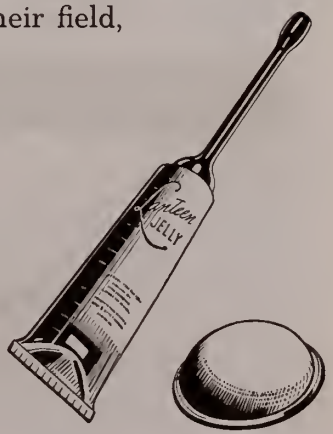
Tarbonis is colorless, odorless, greaseless, does not stain linen or skin. It contains 5% Liquor Carbonis Detergens extracted from selected tar by a unique process, retaining all beneficial factors of tar and eliminating the irritants. Menthol and lanolin are also incorporated in the vanishing cream base, making for a preparation of unusual pharmaceutical elegance. Specifically indicated whenever the action of tar is required.

Toward a Better World



Another important advance toward sociological betterment is Lanteen Medical Laboratories' promotion of Lanteen products—leaders in their field, produced under the most rigid scientific standards.

Proper placement of the Lanteen Flat Spring Diaphragm is extremely simple. Patients require only brief instruction. Collapsible in one plane only, if the entering rim of the diaphragm becomes lodged against the cervix, the other rim cannot be forced into the pubic arch, when the correct size is used. No inserter required. Offered only to the medical profession . . . solely through ethical sources. Complete Sample Package upon request.



L A N T E E N

COPYRIGHT 1946, LANTEEN MEDICAL LABORATORIES, INC., CHICAGO 10

Now

MILLIGRAM-UNITAGE LABELED



Effective immediately, every vial of Penicillin-C.S.C. will state the potency of the product in units per milligram.

The high state of purification achieved in Penicillin-C.S.C. is indicated by this unitage per milligram statement—in no instance will Penicillin-C.S.C. contain less than 1300 units per milligram.

PENICILLIN-C.S.C.

As the illustration indicates, Penicillin-C.S.C. now offers two important advantages:

A) Exact milligram-unitage labeling enables the physician to know precisely what he is administering so far as purity is concerned.

B) Purity above 1300 units per milligram largely avoids the reactions attributed by many investigators to insufficient purification.

CSC PHARMACEUTICAL DIVISION

COMMERCIAL SOLVENTS CORPORATION

17 East 42nd St., New York 17, N. Y.

ACCEPTED AMERICAN MEDICAL ASSN Council on Pharmacy and Chemistry

Penicillin-C.S.C. is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.



Safe Support

THE MENOPAUSAL PATIENT will welcome this efficient assistance in negotiating the decline of ovarian activity with untroubled calm.

Natural estrogens are preferred by many physicians and patients because they are readily tolerated and produce relatively few undesirable side effects.

PLESTRIN

REG. U. S. PAT. OFF.

in Oil

NATURAL ESTROGENS IN OIL HARROWER

Biologically standardized to assure effectiveness and uniform potency.

SUPPLIED: In strengths of 2,000; 5,000; 10,000 and 25,000 I.U. per cc., in sterile ampuls and in sterile multiple-dose vials.

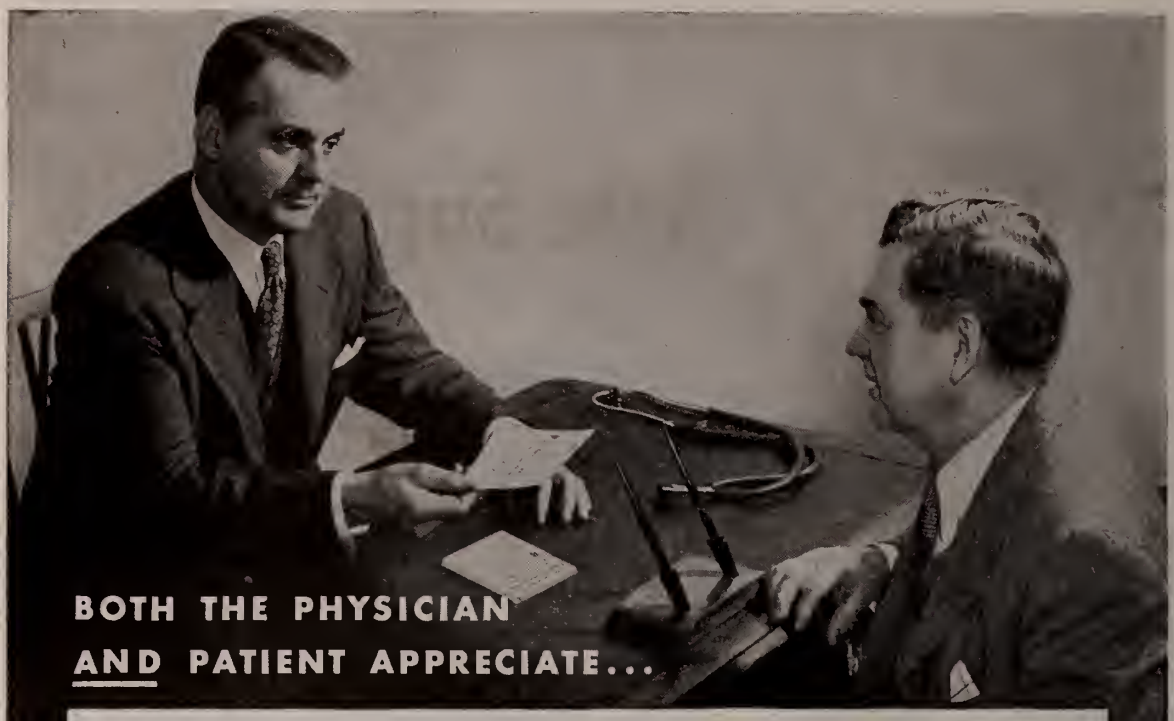
PLESTRIN capsules are available in strengths of 1,000 and 4,000 units each for oral administration.

THE HARROWER LABORATORY · GLENDALE CALIFORNIA · *at Your Service*

The HARROWER LABORATORY, Inc.

GLENDALE 5 · CALIFORNIA

New York 7 · Chicago 1 · Dallas 1



BOTH THE PHYSICIAN
AND PATIENT APPRECIATE...

the unique combination of advantages in

MANDELAMINE

Reg. U. S. Pat. Off.
(Methenamine Mandelate)

● **PROMPT, EFFECTIVE ACTION**
Disturbing urinary symptoms are usually alleviated within three to five days.

● **SAFETY**
Virtual lack of toxicity facilitates therapy and eliminates need for selection of patients.

● **CONVENIENCE OF THERAPY**
Supplementary acidification, restriction of fluid intake, dietary control, or other special measures are unnecessary.

● **WIDE RANGE OF THERAPEUTIC ACTIVITY**
Remarkably efficient in the treatment of pyelonephritis, cystitis, prostatitis, and infections accompanying renal calculi or neurogenic bladder.

Mandelamine is supplied in enteric coated tablets of 0.25 Gm. (3¾ grains) each, in packages of 120 tablets sanitaped, and in bottles of 500 and 1000.



NEPERA CHEMICAL CO. INC.
21 Gray Oaks Ave.
Yonkers 2, New York
Please send me literature, and a physician's sample of Mandelamine.

Name.....M.D.

Street.....

City.....State.....

NEPERA CHEMICAL CO. INC.

Manufacturing Chemists Nepera Chemicals **Yonkers 2, New York**

ESKADIAZINE

makes oral sulfadiazine therapy easier



ESKADIAZINE—the ideal oral sulfadiazine—has these three advantages:—

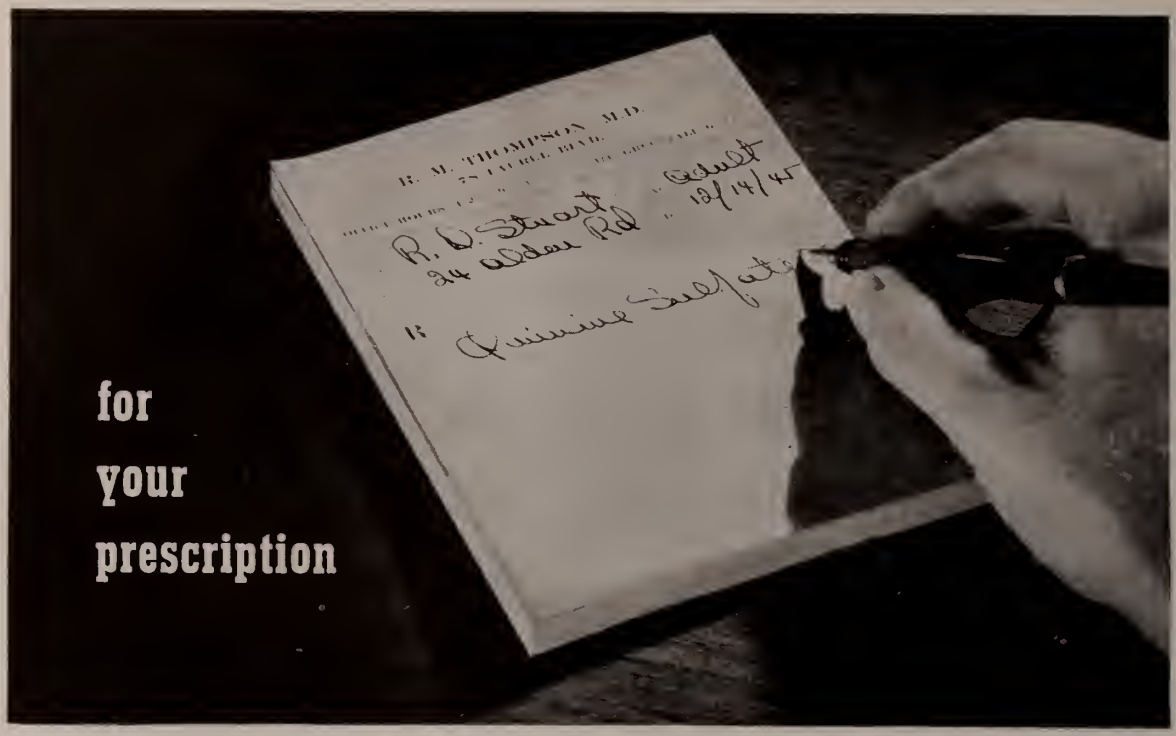
1 **Fluid Form.** This new fluid sulfadiazine is the ideal oral dosage form, especially for infants and children, and also for the many adults who object to tablet medication. Each 5 cc. (1 teaspoonful) contains 0.5 Gm. (7.7 gr.) of sulfadiazine.

2 **Exceptional Palatability.** Eskadiazine is so surprisingly palatable and pleasant in consistency that it is accepted willingly by all types of patients. Children actually like to take it.

3 **More Rapid Absorption.** The findings of a recent clinical study by Flippin and associates (Am. J. M. Sc., Aug. 1945) indicate that with Eskadiazine desired serum levels may be far more rapidly attained than with sulfadiazine administered in tablet form.

Smith, Kline & French Laboratories, Philadelphia, Pa.

S.K.F.'s new, outstandingly palatable fluid sulfadiazine for oral use



QUININE *IS AGAIN AVAILABLE*

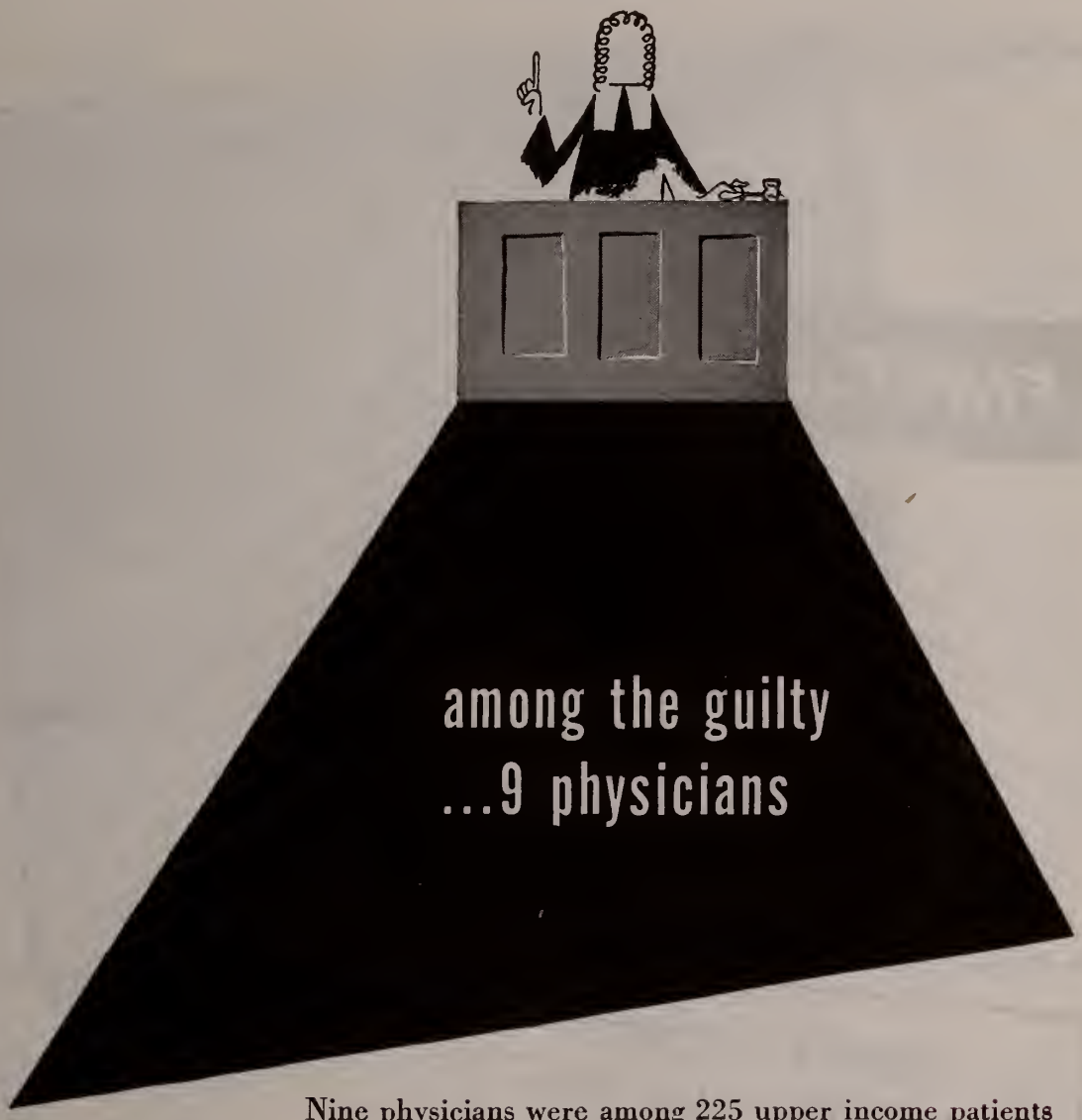
RESERVED exclusively for the use of our Armed Forces throughout the War, Quinine has now been released for civilian use as an antimalarial and therapeutic agent.

Merck & Co., Inc. contributed to the Wartime quinine program by supplying a substantial part of the Government's stock-pile from our reserve stocks. We also expanded our production facilities and continued the manufacture of Quinine and other Cinchona Salts for our Armed Forces and essential public health needs throughout the War.

We are pleased that we can again make Quinine available to the physician for the treatment of malaria and other conditions in which it has proved so effective.



MERCK & CO., Inc. *Manufacturing Chemists* **RAHWAY, N. J.**



Nine physicians were among 225 upper income patients found guilty of diets wanting in one or more vitamins. Low-vitamin diets are not restricted by income or by intelligence.[2] Greater assurance of adequate vitamin maintenance is available in potent, easy to take, and reasonably priced Upjohn vitamin preparations.

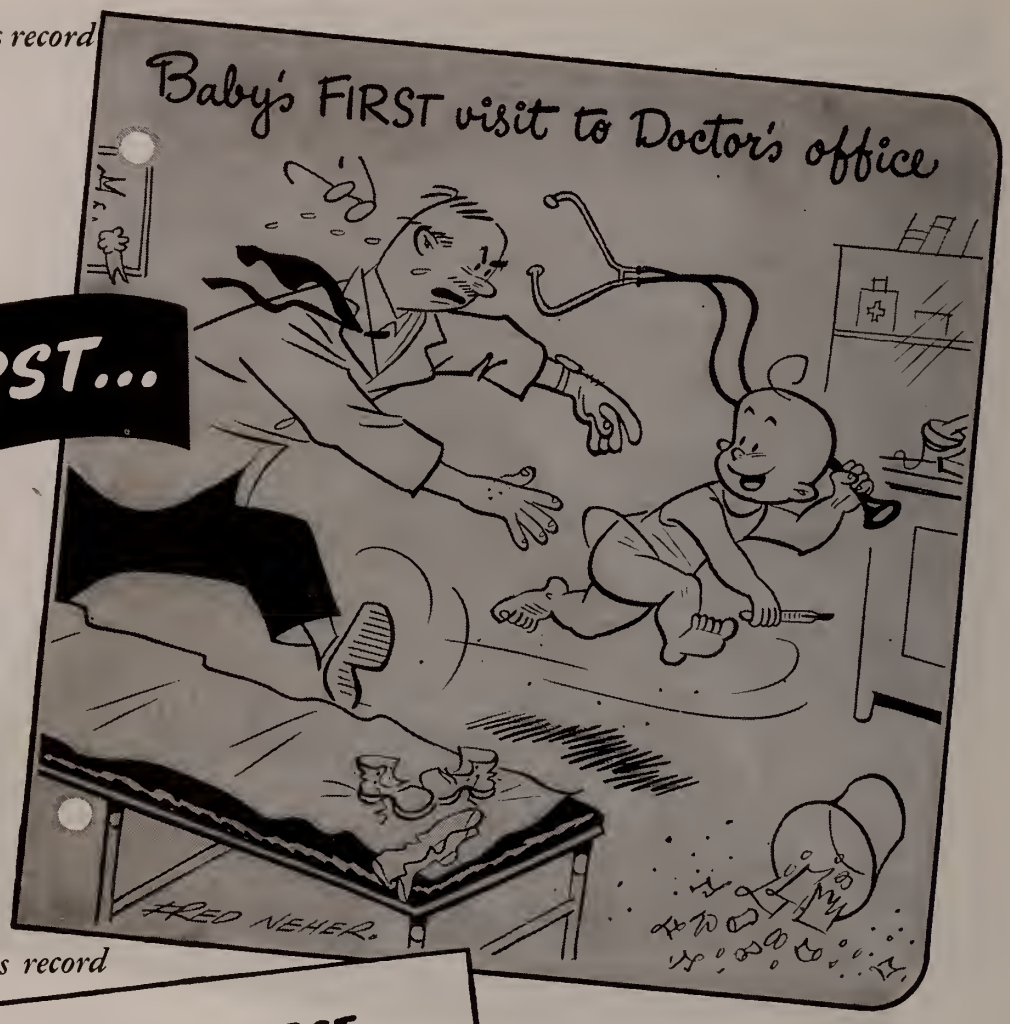
1. New England J. Med. 228:118 (Jan. 28) 1943.
2. J. A. M. A. 129:613 (Oct. 27) 1945.

Upjohn
KALAMAZOO 99, MICHIGAN

FINE PHARMACEUTICALS SINCE 1886

UPJOHN VITAMINS

for Mother's record



FIRST...

for Doctor's record

NESTLÉ'S . . . FIRST EVAPORATED MILK WITH 400 UNITS OF PURE VITAMIN D_3 PER PINT

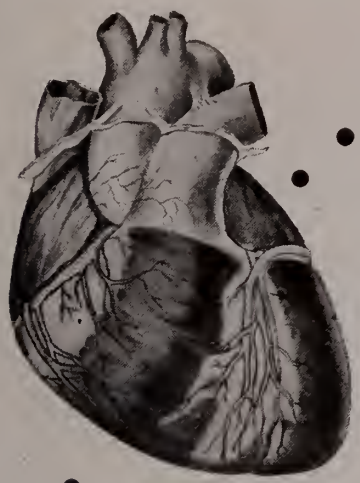
ACCEPTED AMERICAN MEDICAL ASSN.

WISCONSIN ALUMNI RESEARCH FOUNDATION APPROVED FOR VITAMIN D UPON PERIODIC TESTS



A great improvement in evaporated milk for infant feeding . . . since *25 USP units of vitamin* D_3 are added to each fluid ounce of Nestlé's . . . offering *protection against rickets* . . . and *promotion of optimal growth.*

SAFE, SURE, ADEQUATE SOURCE OF VITAMIN D



No different instructions needed for the patient— No difference in therapeutic procedure

Yet All These Advantages

DIGITALINE NATIVELLE—pure crystalline digitoxin—the chief active glycoside of Digitalis purpurea, offers many advantages in the treatment of congestive heart failure, auricular flutter and fibrillation.

Its administration is identical with that of whole digitalis leaf preparations, since one tablet of Digitaline Nativelle (0.1 mg.) is the therapeutic equivalent of 1.5 gr. of standardized whole leaf. Hence no different instructions to the patient are necessary, no greater caution need be observed. One such tablet of Digitaline Nativelle has been found to be the average maintenance dose, to be increased or decreased if necessary. Because it is pure crystalline digitoxin, the dosage of Digitaline Nativelle is measured by weight, hence unvarying potency is provided. Digitaline Nativelle is absorbed in toto, probably directly from the stomach, making for greater tolerability and virtual freedom from nausea and vomiting due to local irritation.

Digitaline Nativelle also provides the outstanding advantage of rapid, complete digitalization from oral administration. The average digitalizing dose is 1.2 mg., given either at one time or in 2 doses of 0.6 mg. each at a 3- to 6-hour interval. Digitalization is complete in 6 to 10 hours.

Physicians are invited to send for samples, literature and bibliography

VARICK PHARMACAL COMPANY, INC.
A Division of E. Fougera & Co., Inc.
75 Varick Street, New York 13, New York

ACCEPTED AMERICAN MEDICAL ASSN. Council on Pharmacy and Chemistry
COUNCIL ACCEPTED

Digitaline Nativelle

REG. U. S. PAT. OFF.

THE ORIGINAL DIGITOXIN, IN PURE, CRYSTALLINE FORM



WHEN THE ORAL ROUTE IS DENIED . . .

Digitaline Nativelle is available in ampuls of 0.2 mg. (1 cc.) and 0.4 mg. (2 cc.), in packages of 6 ampuls.

(County Officers Continued)

McHenry	A. V. Lindberg, Crystal Lake	E. E. Kunde, Marengo
McLean	O. M. Thompson, Bloomington	E. M. Stevenson, Bloomington
Macon	S. G. Smith, Decatur	M. D. Murfin, Decatur
Macoupin	George Hess, Bunker Hill	D. J. Zerbolio, Benld.
Madison	H. M. Cravens, Collinsville	E. F. Moore, Collinsville.
Marion	H. L. Logan, Salem	H. O. Williams, Centralia.
Mason	C. H. Stubenrauch, Havana	W. A. Steele, Havana.
Massac	Stephen P. Ward, Metropolis	G. F. Cummins, Metropolis.
Menard	T. V. Plews, Petersburg	H. P. Moulton, Petersburg.
Mercer	L. E. Robinson, Aledo	V. A. McClanahan, Aledo.
Monroe	E. T. Lark, Columbia	**J. A. Werth, Waterloo.
Montgomery	Wm. T. Douglas, Hillsboro	Nelson K. Floreth, Litchfield
Morgan	V. T. J. Lenth, Jacksonville	G. L. Drennan, Jacksonville
Moultrie	R. C. Coffey, Bethany	W. B. Kilton, Sullivan.
Ogle	L. R. McDaniel, Polo	A. R. Bogue, Rochelle.
Peoria	Fred Decker, Peoria	W. E. Owen, Peoria.
Perry	G. H. Gutridge, Du Quoin	H. I. Stevens, Tamaroa.
Piatt	A. M. Bruner, Bement	W. N. Sievers, White Heath.
Pike	James Goodman, Pleasant Hill	Myer Shulman, Pittsfield.
Pope		L. S. Barger, Golconda.
Pulaski	Homer J. Elkins, Mounds	Otis T. Hudson, Mounds.
Randolph	Ralph Kuhlman, Menard	W. W. Fullerton, Steeleville.
Richland	Alexis T. Telford, Olney	H. N. Fisher, Olney.
Rock Island	Rolland O. Salg, Rock Island	N. C. Barwasser, Moline.
St. Clair	Olin B. Boyd, E. St. Louis	F. E. Bihss, E. St. Louis.
Saline	*G. C. Ferrell, Eldorado	Neva Skelton, Eldorado.
Sangamon	C. S. Mayes, Springfield	Wm. DeHollander, Springfield
Schuyler	A. W. Ball, Rushville	H. O. Munson, Rushville.
Scott	No Society	
Shelby	H. H. Pettry, Cowden	C. H. Hulick, Shelbyville.
Stephenson	C. M. Becker, Freeport	D. J. Doelker, Freeport
Tazewell	Roland C. Wherry, Pekin	Russel K. Taubert, Pekin.
Union	B. V. Rife, Anna	E. V. Hale, Anna.
Vermilion	H. E. Ross, Danville	Holland Williamson, Danville
Wabash	E. P. Keneipp, Mt. Carmel	H. A. Elkins, Mt. Carmel.
Warren	J. O. Firth, Monmouth	Chas. P. Blair, Monmouth.
Washington	P. B. Rabenneck, Nashville	G. A. Green, Nashville.
Wayne	Gilbert T. Ranson, Fairfield	Kenneth O. Hubble, Fairfield
White	C. J. Rosenberg, Norris City	L. R. Medoff, Grayville.
Whiteside	R. H. Lester, Morrison	G. J. Pohly, Sterling.
Will-Grundy	L. J. Wilhelmi, Joliet	Joseph Trizna, Joliet.
Williamson	J. W. Tidwell, Herrin	M. M. May, Marion
Winnebago	Anfin Egdahl, Rockford	John O. Heald, Rockford.
Woodford	R. E. Gordon, El Paso	W. S. Morrison, Minonk.

*Deceased

MANUSCRIPTS INVITED FOR NORTON MEDICAL AWARD

The book publishing firm of W. W. Norton & Company announce that they are again inviting manuscripts for submission to be considered for the Norton Medical Award of $3500 offered to encourage the writing of books on medicine and the medical profession for the layman. The first such award was made to THE DOCTOR'S JOB, Dr. Carl Binger's book, published last spring, which gave the doctor's point of view on his work. Announcement will be made shortly of the winning book for 1946. Closing date for submission of manuscripts this year is November 1st, 1946. All particulars relating to requirements and terms may be had by addressing W. W. Norton & Company Inc., 70 Fifth Avenue, New York 11, N. Y.

ACTION OF PENICILLIN PROLONGED BY CHILLING OF INJECTION AREA

Gonorrhea patients have been effectively treated with one large dose of penicillin injected into the upper arm muscle after thorough chilling of the area with ice, according to a report appearing in the March 9 issue of *The Journal of the American Medical Association.* This chilling is done before and after the injection to prolong the effects of the drug.

Lieut. Commander Max Trumper, from the Naval Medical Research Institute, and Commander Gershom J. Thompson, from the U. S. Naval Hospital, say that they treated 100 patients who had uncomplicated gonorrhea. These patients were divided into three groups, group one receiving 50,000 units of penicillin dissolved in a salty solution, group two receiving 70,000 units, and group three 100,000 units.

The resultant cures in the first two groups were 77.3 per cent and 85.7 per cent respectively. The 100,000 unit dosage cured 91 per cent of the patients. Commenting on this, the authors say that "this percentage compares favorably with the results obtained by others using multiple injections as well as the single injection of 100,000 units of penicillin in mixtures of beeswax and peanut oil.

"It can be concluded from the high percentage of cures that the chilling technic prolonged the effective action of penicillin, reduced to one the number of injections required to treat uncomplicated gonorrhea and rendered that injection painless, all of which was accomplished without introducing any other foreign substance intramuscularly."

The experiments were carried on at the National Naval Medical Center at Bethesda, Md.



in clear relief



Protruding in bold relief from the adjacent tissues, rectal hemorrhoids frequently obscure less well-defined pathology located higher in the ano-rectal area. To avoid all error while providing relief—in the clear—the physician may avail himself of the palliative, yet safe actions of 'ANUSOL'* Hemorrhoidal Suppositories. Containing no narcotic, anesthetic or analgesic drugs to mask the symptoms of more serious rectal pathology; no styptics or hemostatics with attendant danger of thrombosis; and no vasoconstrictors to produce systemic side effects, 'ANUSOL' Hemorrhoidal Suppositories permit continued function of sensory warning mechanisms. Simultaneously, they permit early *and* safe relief by means of decongestion, lubrication and protection.

Schering & Glatz, Inc., *a subsidiary of*

WILLIAM R. WARNER & CO., INC., 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'anusol'

*Trademark Reg. U. S. Pat. Off.

Available in boxes of 6 and 12 suppositories.

Hemorrhoidal Suppositories

Book Reviews

MEDICAL GYNECOLOGY; By James C. Janney, M.D., F.A.C.S. Ass't Professor of Gynecology, Boston University School of Medicine. W. B. Saunders. 1945. Philadelphia and London. Price $5.00.

The author in an endeavor to correlate the didactic and clinical aspects of the subject, presents a concise and very practical guide for the management of the gynecological patient.

In arrangement, the text varies from the usual form. Symptoms are grouped generally along with a discussion of the pathological physiology involved in their production. One section is devoted to physical findings, another describes therapy. Such a format should prove very valuable to the medical student but the general practitioner is apt to find it too cumbersome for ready reference.

History-taking, its prime importance, and many suggestions of aid in obtaining a good history have been rightfully stressed.

The section on vaginitis is excellent as is that on sterility. However the latter subject could be arranged in a more systematic manner. The section on ano-rectal disorders is highly instructive and contains many practical suggestions.

I am not in accord with the author's implication that specific therapy should be exhibited in the case of young girls who have not yet menstruated at the age of 15 or 16 unless of course investigation reveals definite pathology.

The discussion on menorrhagia and dysmenorrhea offers nothing new. Uterine carcinoma is entitled to further elaboration.

The author throughout has demonstrated that he possesses an extensive clinical experience and is to be especially commended for the excellent presentation of the so-called sex problem. The abridgment of such a vast subject is difficult and the author is to be con gratulated on having so well separated the wheat from the chaff.—J.P.F.

DIET MANUAL FOR HOME NURSING

Marie V. Krause, M.S., Eleanora Sense, M.S. Price $2.00. M. Barrows & Co., New York 1945.

This book is compiled primarily for the homemaker who is often confronted with the problem of feeding

(*Continued on page* 60)

Pan-Nutron Super Capules

Improved

Actual Therapy VS Prophylaxis

A POLYVITAMIN OF EXCEPTIONALLY HIGH POTENCY FOR ACTUAL THERAPY

NEW FORMULA

Vitamin A-5000 U.S.P. XII Units
Vitamin D-1000 U.S.P. XII Units
Vitamin C— 100 Milligrams
Vitamin B_1—10 Milligrams
Vitamin B_2—5 Milligrams
Niacinamide 50 Milligrams

The amount of vitamins supplying the basic requirements and the amount needed for actual therapy of a specific vitamin deficiency are two different problems. Only through intensive and persistent therapy can satisfactory results be obtained. Pan-Nutron Super Capules provide therapeutic amounts of all essential vitamins.

NION CORPORATION • LOS ANGELES 38, CALIF.

NION



THE CORE OF COMPETENCE

Knowledge and skill beyond mere technical competence, experience and judgment, and a sense of *individual responsibility* for unfailing performance, shared by the entire personnel, explain why for more than a quarter of a century U. S. Standard Products have merited the sustained confidence of the medical profession in day-by-day hours at the bedside, and in moments of crisis in the operating theatre.

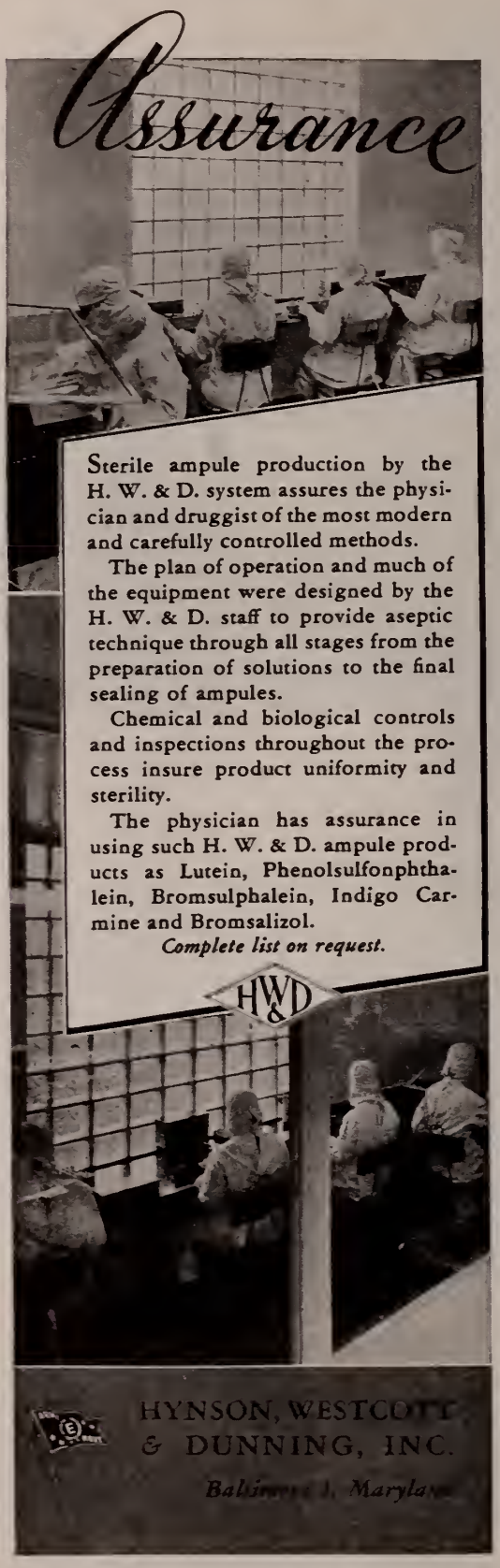
Building soundly through the years—avoiding the untried and merely spectacular, U. S. Standard Products have developed into a comprehensive list of essentials in general practice and the specialties.

U. S. STANDARD PRODUCTS

- BIOLOGICALS
- PHARMACEUTICALS
- ALLERGENIC EXTRACTS
- HORMONES

U. S. STANDARD PRODUCTS CO.

WOODWORTH, WISCONSIN, U. S. A.



BOOK REVIEWS (Continued)

a special diet patient. It is full of useful information, written in an easy to understand manner.

The manual describes first the normal diet so the individual with little knowledge of nutrition can plan for herself or family an adequate daily diet. It proceeds to list all the special diets in common usage with suggested menus and recipes. The purpose of the diet is explained so the menu planner knows what she is doing and why.

The book is a worthwhile addition to any home library.

—F. D.

Books Received

The following books have been received for reviewing, and are herewith acknowledged. This listing should be considered as a sufficient return for the courtesy of the sender. Books that appear to be of unusual interest will be reviewed as space permits each month. Readers desiring additional information relative to books listed, may write the Editor who will gladly furnish same promptly.

CLINICAL ELECTROCARDIOGRAPHY: By David Scherf, M.D., F.A.C.P., Associate Professor of Medicine, New York Medical College, Flower and Fifth Avenue Hospitals; and Linn J. Boyd, M.D., F.A.C.P., Professor of Medicine, New York Medical College, Flower and Fifth Avenue Hospitals. Second Edition. 243 Illlustrations. J. B. Lippincott Company, Philadelphia and London. Price $8.00.

AN INTRODUCTION TO ESSENTIAL HYPERTENSION: By Richard F. Herndon, M.D., F.A.C.P. Charles C. Thomas, Publisher, Springfield, Illinois, 1946. Price $2.50.

SUGGESTION AND HYPNOSIS MADE PRACTICAL, How to Get What You Want: By Samuel Kahn, M.D., Ph. D., Meador Publishing Company, Boston. Price $3.00.

PREVENTIVE MEDICINE AND PUBLIC HEALTH: By Wilson G. Smillie, A.B., M.D., D.P.H., SC.D. (hon) Professor of Public Health and Preventive Medicine, Cornell University Medical College, New York, N. Y. The MacMillan Company, 1946. Price $6.00.

THE 1945 YEAR BOOK OF INDUSTRIAL AND ORTHOPEDIC SURGERY: Edited by Charles F. Painter, M.D., Orthopedic Surgeon to the Massachusetts Women's Hospital and Beth Israel Hospital, Boston. The Year Book Publishers, Inc., Chicago. Price $3.00.

SKIN DISEASES IN CHILDREN: Second Edition Revised and Enlarged. By George M. MacKee, M.D., Professor of Clinical Dermatology and Syphilology, New York Post-Graduate Medical School, Columbia University, New York; and Anthony C. Cipollaro, M.D., Associate in Dermatology and Syphilology, New York Post-Graduate Medical School, Columbia University, New York. With Contributed Chapters. Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, New York and London. Price $7.50.



Summary and Conclusions

1 PROGYNON-B, alpha-estradiol benzoate, an estrogen for intramuscular injection has a prolonged duration of action, 0.33 mg. (2000 R.U.) often controlling menopausal symptoms for 8 to 10 days.

2 Being highly potent fewer injections are required. Cost is, therefore, lower than treatment with other natural estrogens.

3 It produces a remarkable sense of well-being and toxic reactions are practically unknown.

4 "Results . . . lead to the conclusion that alpha-estradiol benzoate is the estrogen of choice."[1]

PROGYNON-B

PROGYNON-B is available in ampules of 1 cc. containing 0.083 mg. (500 R.U.); 0.16 mg. (1000 R.U.); 0.33 mg. (2000 R.U.); 1.0 mg. (6000 R.U.); and 1.66 mg. (10,000 R.U.). In boxes of 3, 5, 6, 50 and 100 ampules.

Trade-Mark PROGYNON-B—Reg. U. S. Pat. Off.

1. Eisfelder, H. W.: J. Clin. Endocrinol. 11:628, 1942.

Schering CORPORATION · BLOOMFIELD · N. J.
In Canada, Schering Corporation Ltd., Montreal

SHRINERS EXPAND PROGRAM OF AIDING CRIPPLED CHILDREN

National Five-Point Plan Established; Includes Scholarships For Surgeons and Nurses. Also to Explore Prevention.

NEW YORK — A nation-wide, five-point program to expand and accelerate its fight against all crippling diseases affecting children will be set into action at once by the Shriners of North America, it was announced in New York by William H. Woodfield, Jr., of San Francisco, Imperial Potentate.

The new program has been developed, Mr. Woodfield said, through a series of recent meetings sponsored by the Imperial Potentate and other members of the Shiners' Imperial Council; and approved by Dr. J. Albert Key of St. Louis, president of the American Orthopedic Association; member surgeons of the Association who serve as chief surgeons of the 15 Shriners' Hospitals for Crippled Children, located in various cities of the country; and W. Freeland Kendrick, chairman of the national board of trustees of the hospitals.

The five phases of the new plan are:

(1) The granting of scholarships, to be known as The Fellowships of the Shriners' Hospitals for Crippled Children, in orthopedic surgery to outstanding, qualified medical students. An initial yearly appropriation of $7,500 has been set aside. Three scholarships of $2,500 each will be made in 1946 for training in three universities, soon to be named.

(2) An annual appropriation of $3,750 will be granted for scholarships in orthopedic nursing. These nurses, in turn, will instruct and give encouragement to other nurses interested in specializing in the crippled children's field.

(3) The establishment of a research project to probe further the sources, methods of treatment and prevention of all crippling diseases attacking children.

"Complete plans for the establishment and operation of this research activity as yet are not finalized," Mr. Woodfield said. "As rapidly as possible, however, this highly important project will be crystallized into reality."

(4) The expansion of present facilities and equipment of the 15 Shriners' hospitals now in operation and the establishment of new hospitals in other localities.

(5) The establishment of convalescent homes in connection with all Shriners' hospitals as rapidly as possible. The installation of recreational and occupational therapy courses to assure continuing physical improvement and self-development after healing has been completed.

The convalescent and occupational therapy plan is already under way at the San Francisco hospital, Mr. Woodfield pointed out.

"This expansion of our efforts in the fields of prevention and cure of crippled children will be integrated closely with the 15 Shriners' hospitals," Mr. Woodfield said. "The first of these hospitals was founded 23 years ago and, to date, more than 100,000 children of underprivileged families have been healed or benefited through treatment."

(*Continued on page* 64)



hop, jump, and skip...



They may skip their cereal or vegetables, but not this new potent concentrate which in unique form supplies the B complex from both *natural* and crystalline sources. Tasty, rich, honey-like 'RYZAMIN-B' No. 2, mixed with peanut butter or jam, tempts the most finicky youngster. Children will take it gladly—not because they *have to*, but because they *want to*. It is Burroughs Wellcome's concentrate of oryza sativa (American rice) polishings, amply fortified with pure crystalline B vitamins. 'RYZAMIN-B' No. 2 provides physicians with a happy solution for the child whose fussy eating habits cry out for a potent vitamin B complex "appetite booster" and who will delight in this unusual dessert-like product.

Each gram contains: Vitamin B_1 (Thiomine Hydrochloride) 1 mgm. (333 U.S.P. Units); Vitamin B_2 (Riboflavin) 0.67 mgm.; Nicotinomide 6.7 mgm. and other factors of the B complex. Gram measuring spoon with each packing.

'RYZAMIN-B' BRAND RICE POLISHINGS CONCENTRATE **No. 2**

WITH ADDED THIAMINE HYDROCHLORIDE, RIBOFLAVIN, NICOTINAMIDE

TUBES OF 2 OZ. AND BOTTLES OF 8 OZ.

'Ryzamin-B' registered trademark

BURROUGHS WELLCOME & CO. (U.S.A.) INC., 9 & 11 EAST 41ST ST., NEW YORK 17, N. Y.

SHRINERS (Continued)

"The important benefits of the Shriners' expanded program of activities in behalf of crippled children has the full and enthusiastic endorsement of the American Orthopedic Association," Dr. Key, the organization's president, said in discussing the announcement.

"For a number of years I was Director of Research for the Shriners' hospital in St. Louis. I attended meetings and worked closely with members of the hospital boards and national Shrine leaders in the hospital activity. I am familiar with the high principles and complete unselfishness with which this work is carried on.

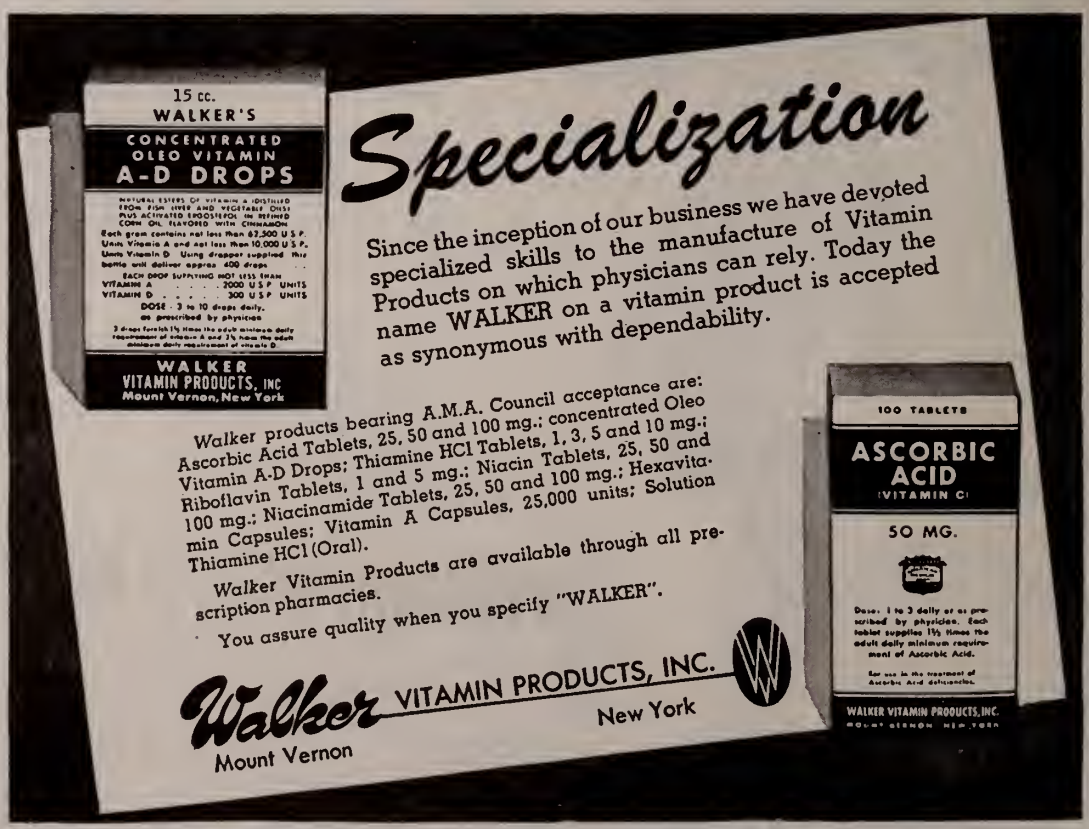
"Many members of our Association have served as chief surgeons in the Shriners' hospitals. It is rare indeed that any organization has been able to obtain and hold the services and loyalty of such a group of men over a so long a period of time. It is impossible for the layman to realize how much this has meant to crippled children of unfortunate circumstances, who have been completely healed or greatly benefited at no cost to their families."

The wide scope of charitable work carried on by the 15 hospitals is revealed in a statement by Mr. Kendrick that operating expenses for the current year will be in excess of $1,000,000. The hospitals and endowments represent an investment of about $45,000,000, he said.

"These hospitals are maintained for the treatment and care of underprivileged crippled children, under 14 years of age, without regard to race, creed or color," Mr. Kendrick said. "We have never participated in public fund-raising drives, but our work has become well known, and many people have contributed generously both during their lifetimes and in bequests specified in their wills."

The first Shriners' hospital was opened in Shreveport, La., September 16, 1922. Other hospitals are located in Minneapolis-St. Paul, Minn.; Portland, Oregon; St. Louis, Mo.; Montreal, Canada; Springfield, Mass.; Chicago; Phildelphia; Greenville, S. C.; Honolulu; Spokane; Salt Lake City; Winnipeg, Canada; Lexington, Ky.; and San Francisco.

The organized effort to control tuberculosis among American wage-earners and their families during the past 35 years has been eminently successful, but it is still far short of its goal — virtual eradication of the disease. Modern facilities for case-finding, treatment, and rehabilitation have not been put to their fullest use. This is particularly true in the colored population, where the hard core of the problem now lies. Tuberculosis would be almost completely eradicated in our country in the near future if existing knowledge and facilities were fully and effectively ultilized. Statistical Bull'n., Met. Life Ins. Co., Nov. 1945.



for topical treatment of otologic infections



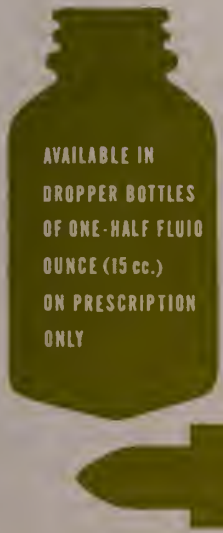
White's

OTOMIDE

A STABLE SULFANILAMIDE-UREA SOLUTION

- **Effective in BOTH acute AND chranic otologic infections.**[1]
- **Patentiated antibacterial patency—because af cambined effects of urea with sulfanilamide.**[2]
- **Nan-irritating—free fram unphysiolagic alkalinity.**
- **Effectively analgesic—without impaired sulfanamide activity.**

White's Otomide is a stable, non-irritating solution. Composed of 5% Sulfanilamide, 10% Urea (Carbamide) and 3% anhydrous Chlorobutanol in a specially processed glycerin vehicle of unusually high hygroscopic activity.



Ethically promoted . . . not advertised to the laity.

WHITE LABORATORIES, INC.

Pharmaceutical Manufacturers, Newark 7, N. J.

1. Strakosch, E. A. and Clark, W. G.: Minn. Med., *26*:276-282 (March) 1943.
2. Tsuchiya, H. M., et al.: Proc. Soc. Exper. Biol. and Med., *50*:262-266 (June) 1942.

Your Advertisers

This is an index of those who serve the Medical Profession and support your journal. All advertisers are approved by your Journal Committee. It will help you to mention your Journal when writing them.

BODY SUPPORTS

J. E. Hanger, Inc., Chicago 5 68
Spencer, Inc., New Haven 7, Conn. 67

CLASSIFIED

Classified Advertisements 72

FOODS

Borden Company, 350 Madison Ave., New York 43
Coca Cola, Atlanta, Ga. 62
Knox Gelatin Laboratories, Johnston, N. Y. .....
Mead Johnson & Co., Evansville, Ind. .. Inside Back Cover
National Dairy Products Co., New York 17 .....
Nestlé's Milk Products, Inc., 155 E. 44th St., New York 17 54
Wander Company, 360 N. Michigan Ave., Chicago .....

FINANCIAL AND INSURANCE

Medical Protective Co., Fort Wayne, Ind. 3
National Discount & Audit Co., New York 71
Physicians Casualty Co., Omaha, Neb. 67

PHARMACEUTICALS

Ames Co., Inc., Elkhart, Ind. 71
Ar-Ex Cosmetics, Inc., 6 N. Michigan Ave., Chicago 2, Ill. 72
Ayerst, McKenna & Harrison Ltd., New York 16 7
Bristol Laboratories, Inc., Syracuse 1, N. Y. 29
Bristol-Meyers Co., New York .....
Burroughs Wellcome & Co., New York 14, 63
Ciba Company, Summit, N. J. 23, 24, 25, 26
Commercial Solvents Corp., Terre Haute, Ind. 48
Crookes Laboratories, Inc., 305 E. 45th St., N. Y. .. 27
Otis E. Glidden & Co., Evanston .....
Gold Pharmacal Co., New York 68
Harrower Laboratories 49
Hoffman-LaRoche, Inc., Nutley, N. J. 19
Holland-Rantos Co., Inc., 551 Fifth Ave., New York ..
Hoosier Pharmacal Co., Indianapolis, Ind. .....
Hynson Westcott & Dunning, Charles and Chase Sts., Baltimore 60
International Vitamin Corp., 50 E. 42nd St., New York City .....
Irwin, Neisler & Co., Decatur, Ill. 31
Lanteen Medical Laboratories, Chicago 10 47
Thos. Leeming Co., 155 E. 44th St., New York 17 .....
Lilly, Eli & Co., Indianapolis, Ind. 38, 39, 40
Maltbie Chemical Co., Newark, N. J. 6
Marcy Laboratories, Inc., New York 11 12
S. E. Massengill Co., Bristol, Tenn. 35
McNeil Laboratories, Inc., Philadelphia, Pa. 33
Merck & Co., Rahway, N. J. 52
Morris, Philip & Co., 119 Fifth Ave., New York 41
National Oil Products, Harrison, N. J. .....
Nepera Chemical, Yonkers, N. Y. 50
Nion Corporation, Los Angeles 38, Calif. 58
Num Specialty Co., Pittsburgh, Pa. 68
Parke, Davis & Co., Detroit, Mich. 34
Pitman-Moore Co., Indianapolis 6, Indiana 4
Rare Chemicals, Inc., Flemington, N. J. 28
Reed & Carnrick, Jersey City 6, N. J. .....
Rees Davis Drugs, Meriden, Conn. 44
Reynolds & Co., R. J. Winston-Salem, N. C. 32
Riedel-de Haen, Inc., New York City .....
Roche-Organon, Inc., Nutley, N. J. 45
J. B. Roerig & Co., 536 Lake Shore Drive, Chicago 13
Schenley Laboratories, Inc., N. Y. 1, N. Y. 20
Schering Corp., Bloomfield, N. J. 9, 61
Schmid, Julius, Inc., 423 W. 55th St., New York City .. 30
G. D. Searle & Co., P. O. Box 5110, Chicago .... Inside Front Cover
Sharpe & Dohme, 11 N. Canal St., Chicago .....
Smith, Kline & French, Philadelphia 10, 51
E. R. Squibb & Sons, New York 22
Frederick Stearns & Co., Detroit, Mich. 17
The Tarbonis Co., Cleveland 3, Ohio 46
Upjohn Co., Kalamazoo, Mich. 53
U. S. Standard Products, Woodworth, Wis. 59
Varick Pharmacal Co., 75 Varick St., N. Y. 13, N. Y. . 55
Walker Vitamin Products, Inc., New York 64
Wm. R. Warner & Co., 113 W. 18th St., New York . 11, 57
Warren-Teed Products Co., Columbus 8, Ohio 36
Whittaker Laboratories, Inc., New York City 37
White Laboratories, Inc. 5, 8, 15, 65
Winthrop Chemical Co., 70 Varick St., New York 18
Wyeth Incorporated 21, 42
Zemmer Co., Pittsburgh, Pa. 72

SANATORIA AND SANITARIA

Costeff Sanatorium, Peoria, Ill. 70
Edward Sanatorium, Naperville, Ill. 70
Kenilworth Sanitarium, Wilmette, Ill. 69
Mitchell Farm, Peoria 69
Milwaukee Sanitarium, Wauwatosa, Wis. .... Back Cover
Norbury Sanatorium, Jacksonville, Ill. 68
North Shore Health Resort, Winnetka 70
Mary E. Pogue School, Wheaton, Ill. 71
Stokes Sanitarium, Louisville, Ky. 72
Weirick's Sanitarium, Elgin, Ill. 72

SURGICAL SUPPLIES

General Electric X-Ray Corp., 2012 W. Jackson Blvd., Chicago .....

RADIUM

Central X-Ray & Clinical Lab., 58 E. Washington St., Chicago 70
Physicians Radium Assn., 55 E. Washington St., Chicago 69

REPORT THIOURACIL ACTION ON 6,836 HYPERTHYROID PATIENTS

Two separate studies, involving a total of 6,836 patients, on the actions, use and dangers of thiouracil, a drug used for the treatment of all types of hyperthyroidism, are reported in the Feburary 9 issue of *The Journal of the American Medical Association.*

One study of the poisonous effect of thiouracil on 1,091 patients who had hyperactivity of the thyroid gland, was compiled by Francis D. Moore, M.D., of Boston, in cooperation with 11 clinics in this country and one in England.

The major reactions discovered were a decrease in the manufacture of white blood cells and drug fever. Eight deaths occurred during the administration of the drug.

The author says the data revealed that "approximately one out of 10 patients in whom treatment was started had to have the treatment stopped because of the incidence of a reaction which could not be handled safely without discontinuance of the drug."

Another report on the poisonous action of thiouracil is presented by seven doctors who made a survey of 5,745 hyerthyroid cases. They are: Walton Van Winkle Jr. of Washington, D.C., H. Sidney Newcomer of New York, Stanton M. Hardy of Pearl River, N. Y., George R. Hazel of North Chicago, Ill., Don Carlos Hines of Indianapolis, Ind., E. A. Sharp of

(*Continued on page* 68)

ACCIDENT - HOSPITAL - SICKNESS

INSURANCE

FOR PHYSICIANS, SURGEONS, DENTISTS EXCLUSIVELY

ALL PREMIUMS COME FROM — PHYSICIANS SURGEONS DENTISTS — ALL CLAIMS GO TO

$5,000.00 accidental death $25 weekly indemnity, accident and sickness	**$8.00** Quarterly
$10,000.00 accidental death $50 weekly indemnity, accident and sickness	**$16.00** Quarterly
$15,000.00 accidental death $75 weekly indemnity, accident and sickness	**$24.00** Quarterly

ALSO HOSPITAL EXPENSE FOR MEMBERS, WIVES AND CHILDREN

86c out of each $1.00 gross income used for members' benefit

$2,800,000.00 INVESTED ASSETS

$13,000,000.00 PAID FOR CLAIMS

$200.000.00 deposited with State of Nebraska for protection of our members.

Disability need not be incurred in line of duty—benefits from the beginning day of disability

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION

43 years under the same management
400 First National Bank Building — OMAHA 2, NEBRASKA

Have You Patients

WITH ANY OF THESE 25 CONDITIONS?



Spencer Abdominal Supporting Belt designed especially for this man. Grips pelvis firmly; effectively coordinates abdominal and back support.

Each Spencer Support is individually designed, cut and made *after* a description of the patient's body and posture has been recorded—and many measurements have been taken. This assures the doctor that the support will be correct from standpoint of body mechanics; that it will fit exactly, be perfectly comfortable.

For a dealer in Spencer Supports look in telephone book for "Spencer corsetiere" or "Spencer Support Shop," or write direct to us.

- Visceroptosis or Nephroptosis with Symptoms
- Inoperable Hernia
- Sacroiliac or Lumbosacral Sprain
- Fractured Vertebrae
- Protruding Disc
- Spondylolisthesis
- Spondylarthritis
- Kyphosis, Lordosis, Scoliosis
- Osteoporosis
- Obesity
- Antepartum-Postpartum
- Breast Conditions Following:
- Hysterectomy
- Nephropexy
- Nephrectomy
- Cholecystectomy
- Colostomy
- Cesarean Section
- Herniotomy
- Spinal Surgery

SPENCER, INCORPORATED

129 Derby Ave., New Haven 7, Conn.
In Canada: Rock Island, Quebec.
In England: Spencer (Banbury) Ltd., Banbury, Oxon.

May We Send You Booklet?

Please send me booklet, "How Spencer Supports Aid the Doctor's Treatment."

Name ..... M.D.

Street .....

City & State G-4-46

SPENCER *INDIVIDUALLY DESIGNED* **SUPPORTS**
Reg. U.S. Pat. Off.
For Abdomen, Back and Breasts

The NORBURY SANATORIUM

JACKSONVILLE, ILLINOIS — INCORPORATED and LICENSED

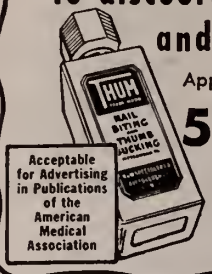
For the Treatment of Nervous and Mental Disorders

DR. ALBERT H. DOLLEAR, Superintendent
DR. FRANK GARM NORBURY, Medical Director
DR. SAMUEL N. CLARK, Physician
DR. HENRY A. DOLLEAR, Associate Physician
DR. FREDERICK A. CAUSEY, Associate Physician in Residence

Address Communications — THE NORBURY SANATORIUM, Jacksonville, Illinois

RECOMMEND THUM

to discourage thumb-sucking and nail biting



Apply like nail polish

50¢ at all drug-stores **$1.00**

THUM contains extract of capsicum (2.34%) in a base of acetone nail lacquer and isapropyl alcohol.

Acceptable for Advertising in Publications of the American Medical Association

J. E. HANGER, inc.

1112 S. Michigan Ave. Chicago 5, Ill.
Phone Wab. 1135
1912 Olive St. St. Louis 3, Mo.
Phone CEntral 1088-1089

DURALUMIN AND ENGLISH WILLOW LIMBS
MECHANICAL ARMS
TRUSSES CANES CRUTCHES
INVALID CHAIRS

Illustrated Catalog Sent on Request

THIOURACIL (Continued)

Detroit, Mich., and W. N. Sisk of Kalamazoo, Mich.

These doctors also found skin rash a major reaction. They discontinued thiouracil treatment, although none of the skin reactions were serious.

In this series, 752 patients were reported as having had one or more side reactions. In 452 cases the investigators had to discontinue treatment.

Because of the large number and severity of the reactions to thiouracil, a poll was made of investigators regarding their opinions on the relative safety of the drug. The doctors say that a "large majority of those who have had experience with thiouracil feel that it offers a definite advantage over present methods of treatment of hyperthyroidism from the standpoint of safety."

Twenty years ago, the idea of going directly to the people and searching for tuberculosis by means of the X-ray, among large groups of apparently healthy individuals, would have sounded like trying to move the mountain to Mohammed — a supposedly impossible task. Today, we are virtually doing that very thing. Modern science and ingenuity have given us the means by which we are able to find the early case of pulmonary tuberculosis. Education of the people has made them see the wisdom of the early diagnosis. Ann'l Rep't., Wisconsin Anti-TB Assn., 1944-45.

in whooping cough

ELIXIR BROMAURATE

GIVES EXCELLENT RESULTS

Cuts short the period of illness and relieves the distressing spasmodic cough. Also valuable in Bronchitis and Bronchial Asthma.

In four-ounce original bottles. A teaspoonful every 3 to 4 hours.

Prescribed by Thousands of Doctors

GOLD PHARMACAL CO. NEW YORK CITY

NERVOUS and MENTAL DISEASES

FOR MILD CASES *FOR SEVERE CASES*

MICHELL FARM — **MICHELL SANATORIUM**

Licensed by State of Illinois

George W. Michell, M.D., Medical Director

INFORMATION ON REQUEST

106 North Glen Oak Ave., Ph. 3-5179, Peoria, Ill.

Chicago Office

46 East Ohio Street . . . Phone Delaware 6770



DDT IN PURE FORM HARMLESS TO MAN

DDT, the new insect repellent, in the so-called pure form holds no danger for man but the solvents used in the preparation of DDT mists and sprays are skin irritants if there is sufficient exposure, according to the January 5 issue of *The Journal of the American Medical Association.*

In answer to a query, *The Journal* said:

"Pure DDT does not cause irritation of the skin in either animals or man, nor is there definite evidence of a sensitizing effect on the skin or of production of other allergic manifestations such as asthma. However, certain solvents used in the preparation of DDT mists, sprays and aerosols are in themselves skin irritants if there is sufficient exposure. In addition, it should be pointed out that contamination of the skin with some of these solvents may cause such symptoms as paresthesias and anesthesia. The vapors of the solvents on inhalation, owing to their property of causing irritation of the mucous membranes, may cause the onset of asthmatic symptoms in a person who is asthmatic. The usually used 5 per cent DDT-95 per cent kerosene

(*Continued on page* 70)

Radium Rental Service

By

THE PHYSICIANS RADIUM ASSOCIATION

Organized for the purpose of making radium available to physicians to be used in the treatment of their patients. Radium loaned to physicians at moderate rental fees, or patients may be referred to us for treatment if preferred.

•

The Physicians Radium Association

Room 1307—55 East Washington St., Pittsfield Bldg., CHICAGO 2, ILL.

Telephones: Central 2268-2269

Wm. L. Brown, M.D., Director

Kenilworth Sanitarium

Resident Staff
EDWARD J. KELLEHER, M. D.
Director
RICHARD D. HUFF, M. D.
Associate

Consultant Staff
THOMAS L. FENTRESS, M. D.
HARRY R. HOFFMAN, M. D.
SAMUEL H. KRAINES, M. D.
WILLIAM J. NOLAN, M. D.

A PRIVATE SANITARIUM FOR THE CARE AND TREATMENT OF MENTAL AND NERVOUS ILLNESSES, ALCOHOLISM AND DRUG ADDICTIONS

2228 BEECHWOOD AVE., WILMETTE, ILL.

Mailing address:
P. O. Box 600
Kenilworth, Ill.

Telephones
Wilmette 351
Wilmette 1662

Edward Sanatorium

NAPERVILLE, ILLINOIS
(30 miles west of Chicago)
Est. 1907 by Dr. Theodore B. Sachs

FOR THE TREATMENT OF TUBERCULOSIS

MEDICAL STAFF
Jerome R. Head, M.D.—Medical Director
Frank Seligson, M.D.—Medical Superintendent
Ideally situated — beautiful landscaped surroundings — modern buildings and equipment
A-A rating by Illinois Department of Health
For detailed information apply to—

Chicago Office of Edward Sanatorium 343 S. Dearborn St., Chicago Wabash 8111

COSTEFF SANITARIUM
Mental and Nervous Disorders
Alcoholism and Drug Addiction

- **SHOCK TREATMENT** (Insulin, Metrazol Electro-shock) administered in suitable cases.
- **ARTIFICIAL FEVER THERAPY**

Home like environment, individual attention. MODERATE RATES.

Licensed by the State of Illinois
HARRY COSTEFF, M. D., Medical Director
1109 NO. MADISON AVE., PEORIA, ILL.
Phone 4-0156 **Literature on request.**

Radium Rental
Prompt Service
Deep X-Ray & Radium Therapy
Central X-Ray & Clinical Laboratory
F. F. Schwartz, M.D., Director
58 E. Washington St., Dear. 6811
CHICAGO, ILL.

DDT (Continued)

spray is a primary skin irritant because of the kerosene. Therefore one would expect a positive patch test. Individuals vary in their skin reaction to kerosene; since this is not a sensitization phenomenon but a straight irritant action, desensitization need not be considered. As a rule the kerosene or other solvent used in the DDT insecticidal spray will evaporate from the surfaces sprayed after a period of a few weeks."

SODA FOR WOOD ALCOHOL POISONING

Four Navy doctors, who made a study of methyl alcohol poisoning, believe the essential principle of treatment is the correction of acidosis with an alkali, such as soda.

The doctors, who reported this study in the January 12 issue of *The Journal of the American Medical Association,* are: Commander W. B. Chew, Commander E. H. Berger, Captain O. A. Brines and Captain M. J. Capron, of the United States Naval Reserve.

Of 31 military personnel patients suffering from wood alcohol poisoning and under the care of these doctors, five died within three hours after



FULLY APPROVED BY THE
AMERICAN COLLEGE OF SURGEONS

NORTH SHORE HEALTH RESORT
WINNETKA, ILLINOIS
on the Shores of Lake Michigan
A completely equipped sanitarium for the care of
nervous and mental disorders, alcoholism and drug addiction
offering all forms of treatment, including electric shock
Samuel Liebman, M.S., M.D.
Medical Director
225 Sheridan Road Phone Winnetka 211

admission to the hospital. The rest recovered and were returned to duty. The authors felt that their success was due to the prompt elimination of acidosis, sometimes called acid intoxication.

Methyl alcohol poisoning usually results in blindness or death. The poison seems to have a selective effect on the optic nerve and retina of the eyes. The symptoms are usually delayed for nine to 36 hours, during which time an individual may continue to carry on. Suddenly weakness, headache, nausea, vomiting and collapse occur. If death does not come first, then the coma may last for several days before improvement occurs. Permanent blindness is then a frequent result.

Tuberculosis is the most virulent scourge in Greece today with malaria a runner up. Entire villages in which every citizen seemed to be suffering from tuberculosis were seen. Although there is less starvation, disease is widespread because many persons are still crowded together in dugouts, basements and lean-tos. Through joint efforts of the government and relief associations, vitamin foods are being served daily to thousands of child war victims. John Dula, Senior Child Welfare Specialist of the UNRRA. J.A.M.A., Jan. 12, 1946.

Social & Educational Adjustment

for exceptional children of all ages. Visit the school noted for its work in educational development and fitting such children for more normal living. Beautiful grounds. Home atmosphere. Separate buildings for boys and girls. Get catalogue.

***The* MARY E. POGUE SCHOOL**

112 GENEVA ROAD • WHEATON, ILL.
(NEAR CHICAGO)

NO COLLECTION — NO CHARGE

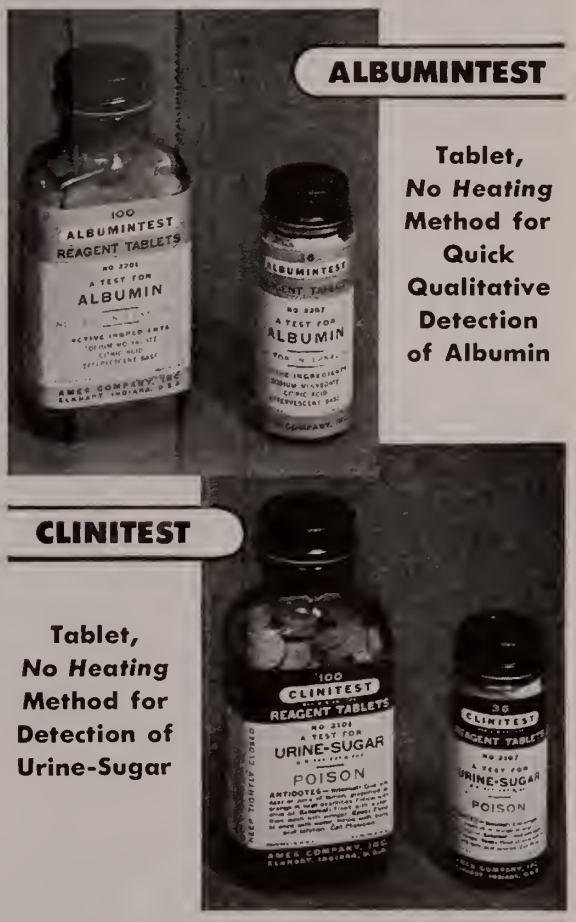
20 years of friendly dealings with patients in your community have taught us how and when to collect.

Write. Our local men will do all the work of compiling the list. You just have to blue-pencil it.

NATIONAL DISCOUNT & AUDIT CO.

Herald Tribune Bldg. New York 18, N. Y.

***Companion* PRODUCTS *for* URINE ANALYSIS**



Both products provide simple, reliable tests that can be conveniently and safely carried by physicians and public health workers. They are equally satisfactory for large laboratory operations. Clinitest is also available in special Tenite plastic pocket-size set for patient use.

ALBUMINTEST —
in bottles of 36 and 100

CLINITEST —
LABORATORY OUTFIT (No. 2108) Includes tablets for 180 tests; additional tablets can be purchased as required.
PLASTIC POCKET-SIZE SET (No. 2106) Includes all essentials for testing.

Complete information upon request

Distributed through regular drug and medical supply channels.

AMES COMPANY, INC.
Elkhart - Indiana

B-Lozenges
SULFATHIAZOLE 2½ GR.
ZEMMER

Sulfathiazole ..... 2½gr.
Benzocaine ..... 1/10gr.
Oil Wintergreen ..... q.s.

Chemists to the Medical Profession

THE ZEMMER COMPANY, OAKLAND STATION, PITTSBURGH 13, PA.



IL-4-46

MORPHINE AND OTHER DRUG ADDICTIONS
Selected patients who wish to make good and learn how to keep well; methods easy, regular, humane. Dr. Weirick's Sanitarium, Elgin, Ill.

THE STOKES SANITARIUM 923 Cherokee Road, Louisville, Kentucky

Our **ALCOHOLIC** treatment destroys the craving, restores the appetite and sleep, and rebuilds the physical and nervous condition of the patient. Liquors withdrawn gradually, no limit on the amount necessary to prevent or relieve delirium.

MENTAL patients have every comfort that their home affords.

The **DRUG** treatment is one of gradual Reduction. It relieves the constipation, restores the appetite and sleep; withdrawal pains are absent. No Hyoscine or rapid withdrawal methods used unless patient desires same.

NERVOUS patients are accepted by us for observation and diagnosis as well as treatment.

E. W. STOKES, Medical Director, Established 1904.
Telephone—Highland 2101

Classified Ads

RATES FOR CLASSIFIED ADVERTISEMENTS—For 30 words or less: 1 insertion, $3.00; 3 insertions, $8.00; 6 insertions, $14.00; 12 insertions, $24.00; from 30 to 50 words: 1 insertion, $4.00; 3 insertions, $10.50; 6 insertions, $20.00; 12 insertions, $30.00. Extra words: 1 insertion, 10c each; 3 insertions, 25c each; 6 insertions, 40c each; 12 insertions, 50c each. A fee of 25c is charged for those advertisers who have answers sent care of the Journal. Cash in advance must accompany copy.

FOR SALE: 20 bed hospital, with all electrical equipment, and X-ray machine. Delivery room and nursery for obstetrical patients. Brick building, large territory, well established, located in Metropolis, Illinois, a city of 7000 population, surrounded by factories and good farming country. Can be bought at a reasonable price. Mrs. J. A. Fisher, Metropolis, Illinois.

FOR SALE: Private practice. Un-opposed. Essential area Minnesota Catholic Community. Population 2000. Five room office. Fully equipped. Hospital facilities. Present doctor leaving on account of health. Write full particulars Box 122, Illinois Medical Journal, 30 N. Michigan, Chicago 2.

WANTED: Residents in psychiatry, $1800 to $2400 a year; public health physicians, $3720 to $4320 a year; physicians, $3720 to $4320 a year; tuberculosis control physicians, $4320 to $5280 a year; psychiatrists, $4320 to $5280 a year; clinical directors, $5280 to $5940 a year. Illinois Dept. of Public Welfare, 176 W. Adams St., Chicago 3, Illinois.

WANTED: Laboratory helpers, $1260 to $1840 a year; laboratory technicians, $1560 to $1980 a year; laboratory technicians, $1800 to $2400 a year; x-ray technicians, $2100 to $2640 a year. Illinois Dept. of Public Welfare, Chicago 3, Illinois.

WANTED: Energetic, ambitious young, or middle-aged, physician, who would be interested in the practice of radium therapy. Permanent connection in mind. Large Mid-West city. Address replies to No. 124 care of The Illinois Medical Journal, 30 N. Michigan Ave., Chicago 2.

WANTED: Physician to serve as medical director for 35 bed tax supported tuberculosis sanatorium in middle west. Salary and maintenance. State qualifications and experience. Box 123, Illinois Medical Journal, 30 N. Michigan, Chicago 2.

FRIEDMAN PREGNANCY TESTS require only 48 hours. Write for mailing tube and vial. Established 1938. Price $5.00. Pregnancy Diagnostic Laboratories, H. S. Lames, D.V.M., Dysart, Iowa.

3/47

STREPTOMYCIN SHORTENS CONVALESCENCE PERIOD IN TULAREMIA

A new bacteria-destroying substance called streptomycin, derived from a soil microbe, similar to penicillin, has relieved the symptoms in tularemia within 12 hours of administration, according to two Cincinnati physicians—Lee Foshay and A. B. Pasternack.

To date there has been no specific treatment for this disease, sometimes called "rabbit fever." The doctors' report, appearing in the Feburary 16 issue of *The Journal of the American Medical Association*, is based on the treatment of seven patients infected by handling wild rabbits.

Drs. Foshay and Pasternack, who are from the Departments of Bacteriology and of Medicine, University of Cincinnati College of Medicine, and the Cincinnati General Hospital, say that the disease usually causes 31 days of fever, keeps the patient in bed 31 days, and has a duration period of four months.

With the administration of streptomycin, the doctors noted, patients experienced relief from the distressing general symptoms of headache, mental dullness, sense of prostration, joint pains, muscle pains, chills or chilly sensations and nausea before the end of the first day of treatment. The authors feel that the action of this drug will greatly reduce the period of convalescence.

The dosage, 30,000 units injected into the muscles every three hours, was administered for five days. With further experience the doctors recommend a larger daily dosage to be injected beneath the skin rather than into the muscles.

Tularemia is sometimes called "rabbit fever" for almost 90 per cent of human infections result from contact with infected tissues, body fluids or pelts or rabbits. The disease is characterized by swellings of the skin with the formation of abscesses, swelling of the lymph glands and small spots of infection in the internal organs.

Streptomycin, which has successfully attacked diseases not affected by either pencillin or the sulfonamides, was discovered by Selman A. Waksman, of the New Jersey Agricultural Experiment Station, Rutgers University, in 1943, but is not yet generally available.



UNSCENTED COSMETICS
FOR THE ALLERGIC PATIENT

AR-EX Cosmetics are the only complete line of *unscented* cosmetics regularly stocked by pharmacies. To be certain that your perfume sensitive patients do not get scented cosmetics, prescribe *AR-EX Unscented Cosmetics*. SEND FOR FREE FORMULARY.

AR-EX

FREE FORMULARY

DR._____
ADDRESS_____
CITY_____
STATE_____

AR-EX COSMETICS, INC., 1036 W. VAN BUREN ST., CHICAGO 7, ILL.



COPYRIGHT 1945, MEAD JOHNSON & CO.,
EVANSVILLE, IND., U. S. A.

Academy of Medicine
2 E 103 St
New York N Y
Exch

COLONIAL HALL
One of the 14 Units in "Cottage Plan"

FOR NERVOUS DISORDERS

MAINTAINING the highest standards for more than a half century, the Milwaukee Sanitarium stands for all that is best in the care and treatment of nervous disorders. Photographs and particulars sent on request.

Josef A. Kindwall, M. D.
Carroll W. Osgood, M. D.
William T. Kradwell, M. D.
Merle Q. Howard, M. D.
Lewis Danziger, M. D.
Russell C. Morrison, M. D.
Arthur J. Patek, M. D.

G. H. Schroeder
Business Manager

MILWAUKEE SANITARIUM

WAUWATOSA—WISCONSIN

PHYSICIAN'S CHICAGO OFFICE—1117 Marshall Field Annex—Wednesdays, 1-3 P.M.—Central 1152

The ILLINOIS Medical Journal

May, 1946

THE N.Y. ACADEMY OF MEDICINE
JUN 14 1946
LIBRARY

In This Issue

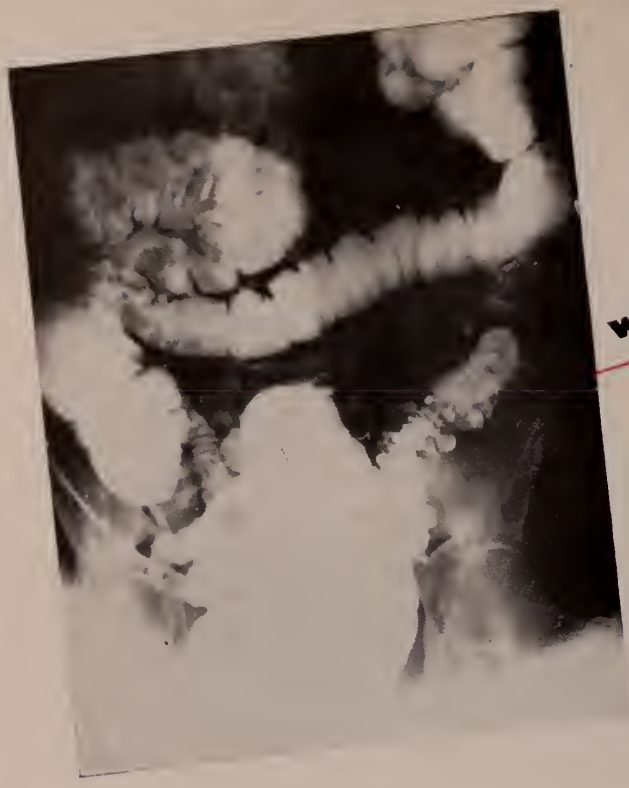
Plastic and Dental Prosthetic Repair of Jaw Injuries

The use of Preserved Blood Plasma in Civilian Practice

---- and Others

(See page 35 for complete Table of Contents)

OFFICIAL PUBLICATION OF THE ILLINOIS STATE MEDICAL SOCIETY



when spasm means pain . . .

PAVATRINE with PHENOBARBITAL affords potent, swift, non-narcotic relief through relaxation of gastrointestinal smooth muscle.

The effectiveness of PAVATRINE as an antispasmodic has now been enhanced by the addition of phenobarbital to allay the central nervous symptoms that so often accompany spastic phenomena.

PAVATRINE with Phenobarbital

PAVATRINE (Searle) . . . . . 125 mg. (2 gr.)
(β-diethylaminoethyl fluorene-9-carboxylate hydrochloride)
PHENOBARBITAL . . . . . 15 mg. (¼ gr.)

—the new, synthetic antispasmodic which exerts both a local action on smooth muscle and a neurotropic effect on the nerve supply to the spastic muscle. Free from the toxic manifestations of the belladonna derivatives, PAVATRINE, in combination with phenobarbital, provides complete management for the distress of gastrointestinal, uterine and genito-urinary spasm.

Indicated for relief of:
Gastrointestinal spasm
Uterine spasm associated with dysmenorrhea
Urinary bladder spasm (as in cystitis, post-instrumentation spasm, etc.)

Pavatrine is the registered trademark of G. D. Searle & Co., Chicago 80, Illinois

SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

Entered as Second-Class Matter July 21, 1919, at the Post Office, Oak Park, Illinois, under the Act of March 8, 1879. Acceptance for mailing at special rate of postage provided for in section 1102, Oct of October 8, 1917, authorized July 15, 1918. Office of Publications, 715 Lake Street, Oak Park, Ill.

Excellence

resides in quality, not in quantity.

By
the *quality*
of its Defense
The Medical Protective Company
excels
in preserving
a Doctor's Reputation, Property and Earning Power
against Damage
from Malpractice charges



THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA

typical case histories



ACUTE ULCERATIVE TONSILLITIS—

TREATMENT

6-8 Tablets Sulfathiazole Gum chewed daily.

RESULTS

Immediate improvement. Temperature normal after 72 hours.

ACUTE RHINITIS AND SECONDARY PHARYNGITIS—

TREATMENT

Sulfathiazole Gum, 1 tablet chewed for 1 hour every 2 hours.

RESULTS

Throat symptoms improved immediately, entirely disappeared after 48 hours. Patient continued with common head cold.

PLAUT-VINCENT'S ANGINA—

TREATMENT

One Sulfathiazole Gum Tablet chewed ½ to 1 hour, every hour for 8 doses.

RESULTS

Complete recovery within 56 hours.

White's SULFATHIAZOLE GUM*

White's Sulfathiazole Gum now has been used with marked success in many thousands of cases of miscellaneous infections of oral and pharyngeal tissues, notably acute tonsillitis and pharyngitis, septic sore throat, infectious gingivitis and stomatitis, Vincent's infection; also indicated in the prevention of local infection secondary to oral and pharyngeal surgery.

CLINICAL ADVANTAGES:

A single tablet chewed for *one-half to one hour* provides a salivary concentration of locally active sulfathiazole averaging approximately 70 mg. per cent. Moreover, resultant blood levels of the drug, even with maximal dosage, are so low (rarely reaching 0.5 to 1 mg. per cent) that systemic toxic reactions are virtually eliminated.

Supplied in packages of 24 tablets, sanitaped in slip-sleeve prescription boxes.

IMPORTANT: Please note that your patient requires your prescription to obtain this product from the pharmacist.

A product of

WHITE LABORATORIES, INC.

Pharmaceutical Manufacturers, Newark 7, N. J.

Be Sure

CORAMINE 5cc.

Is In Your Bag



BE SURE it's in *your* bag! Confidence in meeting the ever-present possibility of respiratory failure is assured when you know that you have the 5 cc. ampuls of Coramine with you. Prompt, powerful respiratory stimulation results from intravenous dosage of 5 cc. or more. Coramine's low toxicity, assuring a wide margin of safety, allows repetition of this dosage in cases where initial clinical response is not adequate.

CORAMINE—*Trade Mark Reg. U. S. Pat. Off.*

CIBA PHARMACEUTICAL PRODUCTS, INC.

SUMMIT · NEW JERSEY

Ciba



Steroid Hormones · Fine Pharmaceuticals



terra firma



The management of hemorrhoids rests on solid therapeutic grounds when it achieves relief without resort to dangerous local narcotization or anesthetization. 'ANUSOL'* Hemorrhoidal Suppositories contain neither anesthetic nor narcotic agents and so do not mask the symptoms of more serious rectal pathology. Quick, safe relief is attained by the removal of inflammatory pressure on the nerve endings. Burning and itching are soothingly abated while demulcent protection guards against the complications of bleeding and infection.

Schering & Glatz, Inc., a subsidiary of

William R. **WARNER** and Co. Inc. 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'anusol'

*Trademark Reg. U. S. Pat. Off.

Boxes of 6 and 12 suppositories

Hemorrhoidal Suppositories



PROLONGED BRONCHODILATATION

plus RELAXING SEDATION IN *bronchial asthma*

In utilizing the synergistic actions of Calpurate, ephedrine and phenobarbital—EPURAL becomes a potent bronchodilator and sedative, significantly free from untoward central and cardiac side-effects.

For symptomatic treatment of bronchial asthma, hay fever and allergic coryza, EPURAL offers the therapeutic advantage of providing *prolonged bronchodilatation*, and effecting *safe sedation*, which serves to counteract the natural tendency of ephedrine (when used alone) to stimulate the central nervous system.

While EPURAL may be safely administered over protracted periods, with freedom from gastric disturbances, it should be used with caution in hyperthyroidism, diabetes mellitus, and severe cardio-renal disease.

FORMULA: Calpurate (calcium theobromine—calcium gluconate) . 4 gr.
Ephedrine sulfate . . . . . ¼ gr.
Phenobarbital . . . . . ¼ gr.
In bottles of 100, 500 and 1,000 tablets.

EPURAL

For Safe, Symptomatic Relief of Allergic Respiratory Conditions

THE MALTBIE CHEMICAL COMPANY, NEWARK, NEW JERSEY

con′ ju-gāted

an important word in estrogenic therapy

Estrogens are excreted by the kidney not as free chemical compounds but as *conjugates*. Equine estrogens... estrone, estradiol, equilin, equilenin and hippulin are eliminated as sulfates, the *conjugated* form.

In "PREMARIN", the *conjugated* estrogens are carefully protected against hydrolysis to retain their highly desirable characteristics . . . water solubility . . . dependable oral activity . . . high therapeutic effectiveness. An extensive bibliography on "PREMARIN" attests to its comparative freedom from toxicity and to the fact that treatment is usually followed by a general feeling of well-being.

ACCEPTED AMERICAN MEDICAL ASSN Council on Pharmacy and Chemistry

"Premarin"

REG U S PAT OFF

CONJUGATED ESTROGENS (equine)

TABLET No. 866 (1.25 mg.)

TABLET No. 867 (Half-Strength) (0.625 mg.)

LIQUID No. 869 Each teaspoonful is equivalent in potency to one 'Premarin' Half-Strength Tablet

Ayerst

AYERST, McKENNA & HARRISON LIMITED, 22 E. 40th Street, New York 16, N. Y.

THOROUGHLY *Bland and Specific* FOR ITS PURPOSE



THE need for a dependable antipruritic agent arises frequently in pediatric practice. Yet, because of the sensitivity of infants' and children's skin, special care must be taken in the selection of the antipruritic agent to prevent further dermal involvement.

Because of its unusual blandness, Calmitol Ointment may well be the routine antipruritic for all pediatric needs. Its dependable effectiveness provides many hours of relief from a single application. Free from local irritation, Calmitol Ointment has been found of great symptomatic value in eczema, urticaria, intertrigo, diaper rash, during the resolving stages of the exanthems, contact dermatitis, and food rashes.

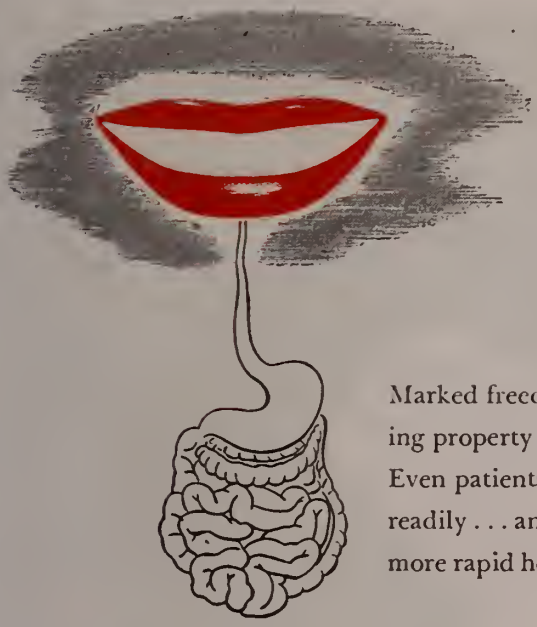
CALMITOL

THE DEPENDABLE ANTI-PRURITIC

Calmitol stops itching by direct action upon cutaneous receptors and end-organs, minimizing transmission of offending sensory impulses. The ointment is bland and nonirritating, can safely be applied to any skin or mucous membrane surface. Active ingredients: camphorated chloral, menthol, and hyoscyamine oleate. Calmitol Liquid, prepared with an alcohol-chloroform-ether vehicle, should be used only on unbroken skin areas.

Thos. Leeming & Co. Inc.

155 East 44th Street, New York 17, N. Y.



Agreeable Iron...

Marked freedom from gastro-intestinal distress is an outstanding property of Fergon—Stearns' stabilized ferrous gluconate. Even patients intolerant to other forms of iron accept Fergon readily . . . and most patients show more efficient utilization . . . more rapid hemoglobin gain.

Fergon

STEARNS FERROUS GLUCONATE

For Hypochromic Anemias

THERAPEUTIC APPRAISAL: *Better Tolerated*—Fergon is only slightly ionized, therefore virtually non-irritating even when administered before meals. *Better Absorbed*—Fergon is soluble throughout the entire pH range of the gastro-intestinal tract. *Better Utilized*—as shown by comparative clinical studies.*

INDICATED in the treatment and prevention of hypochromic anemias, especially in patients intolerant to other forms of iron.



AVERAGE DOSE for adults is 3 to 6 tablets (5 gr.) or 4 to 8 teaspoonfuls of elixir daily; for children, 1 to 4 tablets (2½ gr.) or 1 to 4 teaspoonfuls of elixir daily.

SUPPLIED as 5% elixir, bottles of 6 and 16 fl. oz.; 2½ gr. tablets, bottles of 100; 5 gr. tablets, bottles of 100, 500 and 1000.

A trial supply will gladly be sent on request.

Frederick Stearns & Company
Division
DETROIT 31, MICHIGAN

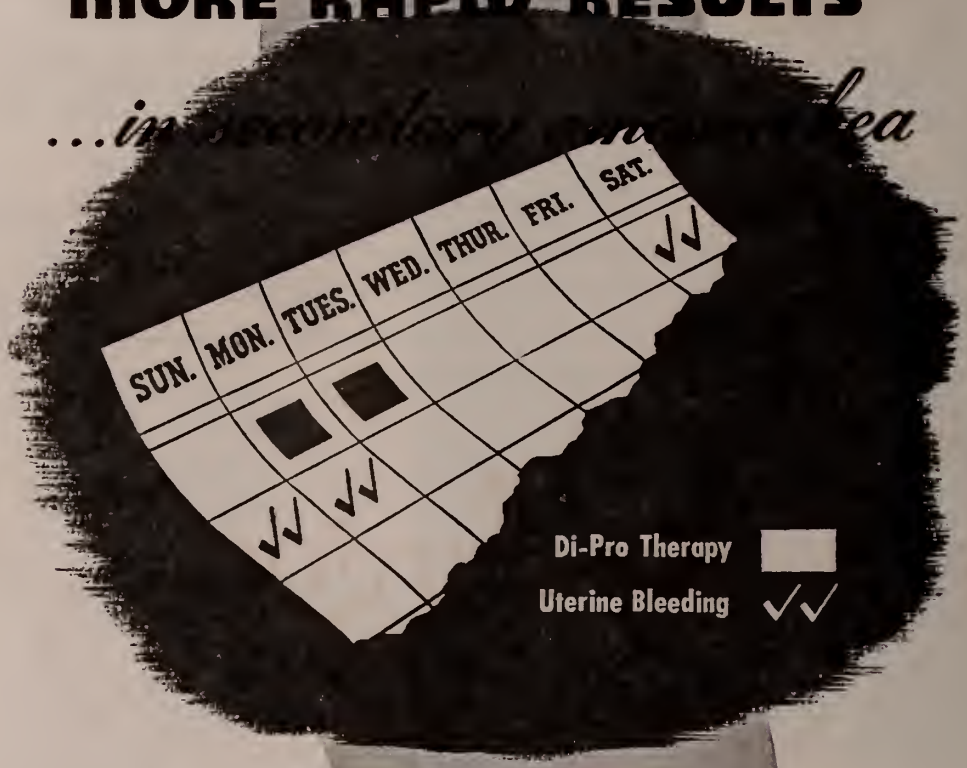
NEW YORK KANSAS CITY SAN FRANCISCO WINDSOR, ONTARIO SYDNEY, AUSTRALIA AUCKLAND, NEW ZEALAND

*Reznikoff, P., and Goebel, W. F.; J. Clin. Investigation 16:547, 1937

Trade-Mark *Fergon* Reg. U. S. Pat. Off.

'MORE RAPID RESULTS'*

...in secondary amenorrhea



DI-PRO *ampuls*
'Roche-Organon'

Shortens duration of treatment. Offers greater convenience • Lowers cost of treatment • Reassures patient rapidly.

In the treatment of functional secondary amenorrhea of less than two years' duration, the use of DI-PRO ampuls 'Roche-Organon' provides "a rapid method for the induction of bleeding."* Only two injections on two successive days are needed to provoke uterine bleeding in most cases. Each injection consists of 2.5 mg of Dimenformon Benzoate and 12.5 mg of Progestin 'Roche-Organon,' mixed in the same syringe. DI-PRO ampuls are packaged for both one and three courses of treatment.

ROCHE-ORGANON, INC. • NUTLEY 10, N. J.

*S. C. Freed, *West. J. Surg.*, 54:1, 1946



Gentle menopausal therapy

Gentle natural therapy of the menopause, relatively free from untoward side effects may be obtained conveniently and economically with ESTINYL (ethinyl estradiol), an oral estrogen closely related to the true follicular hormone.

ESTINYL

By virtue of its origin and composition ESTINYL favors an easy and calm transition, and yet because of its great oral potency dispels climacteric symptoms rapidly. For the average menopausal patient one tablet of 0.05 mg. daily is usually sufficient, but two or three tablets may be used if required.

ESTINYL Tablets are best administered at bedtime. Available in two strengths—0.05 mg. (pink) and 0.02 mg. (buff) tablets. Bottles of 100, 250 and 1000.

Trade-Mark ESTINYL—Reg. U.S. Pat. Off.

SCHERING

Schering CORPORATION · BLOOMFIELD · N.J.
In Canada, Schering Corporation Limited, Montreal



RHEUMATOLOGISTS agree that in the primary stages of the chronic arthritides, when only the periarticular or other soft tissues of the involved joints are affected, the pathologic changes are reversible and hence ultimate recovery is possible.

The newer knowledge of arthritis—which emphasizes the systemic nature of the disease—is the basis for a more optimistic prognosis, even in the advanced stages of chronic arthritis when the osseous and cartilaginous changes have become irreversible.

Though the roentgenologically discernible anatomic changes

DARTHRONOL FOR THE

J. B. ROERIG & COMPANY • 536 Lake Shore Drive

may be beyond repair, adequate systemic therapy, optimal nutrition, physiotherapy, physical and mental rest, and orthopedic measures can do much to prevent or correct deformities, relax painful spastic muscles, abolish pain, and restore useful function.

Darthronol, because of the pharmacodynamic and nutritional influences of its nine active ingredients, warrants inclusion in the complete arthritis rehabilitation program. In addition to exerting the favorable influence in arthritis attributed to Vitamin D, Darthronol plays an important role in the aim to improve the general well-being, to correct the multiple systemic disturbances frequently associated with chronic arthritis, and to restore the nutritional status to optimal levels—a truly rational approach to the rehabilitation of patients afflicted with chronic arthritis.

EACH CAPSULE CONTAINS:



Vitamin D (Irradiated Ergosterol)	50,000 U.S.P. Units
Vitamin A (Fish-Liver Oil)	5,000 U.S.P. Units
Ascorbic Acid	75 mg.
Thiamine Hydrochloride	3 mg.
Riboflavin	2 mg.
Pyridoxine Hydrochloride	0.3 mg.
Calcium Pantothenate	1 mg.
Niacinamide	15 mg.
Mixed Natural Tocopherols	3.4 mg.

(Equivalent in biological activity to 3 mg. of Alpha Tocopherol)



Even when the osseous and cartilaginous changes have become irreversible, a complete rational therapeutic program can accomplish much in abolishing pain, diminishing soft tissue swelling and restoring useful function.

ARTHRITIC

Chicago 11, Illinois

AUTHORITATIVE clinical investigators place strong emphasis on the importance of the barrier in conception control.

In a recent comprehensive report,[1] physicians indicated an overwhelming preference for the diaphragm and jelly method (93% of 36,955 new cases).

In keeping with these expressed opinions we continue to suggest that for the optimum in protection the physician prescribe the combined use of occlusive diaphragm and spermatocidal jelly.

You assure your patient a product of highest quality when you specify Ramses

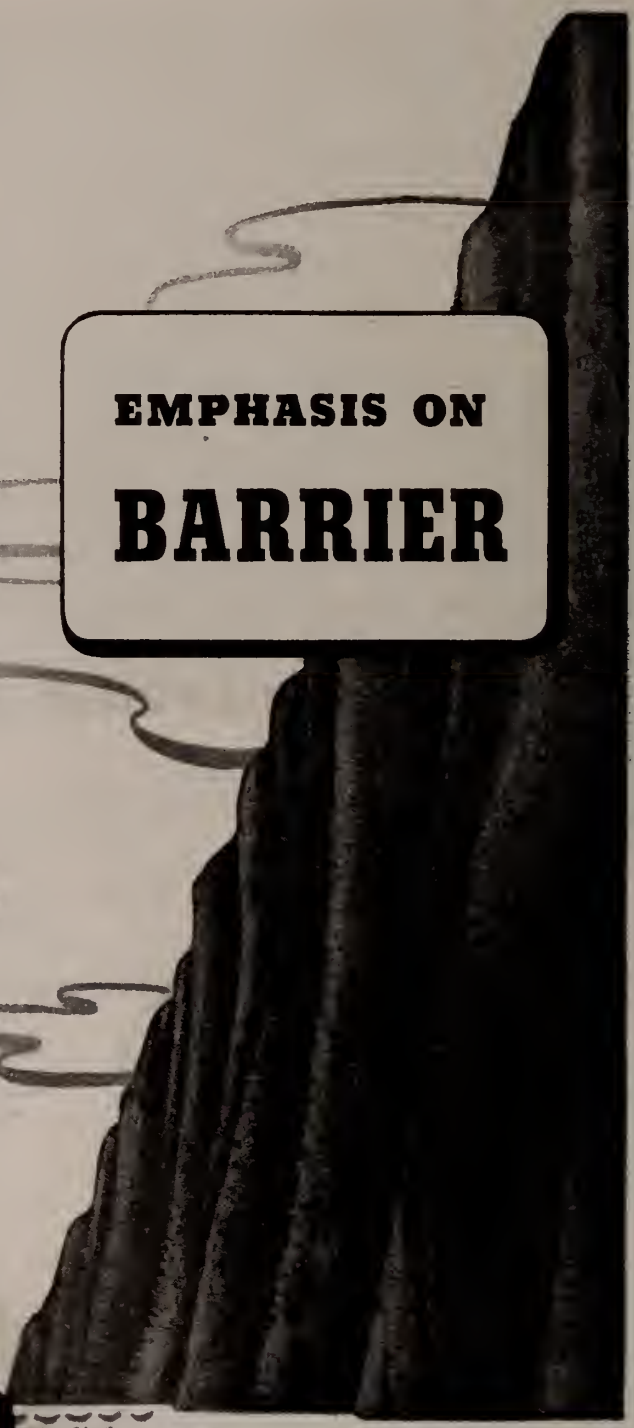
EMPHASIS ON BARRIER

Competent observers report:

"Jellies and creams used without mechanical devices yield relatively high protection, but studies have not proven them fully dependable to block the external os, or to invalidate all sperm."[2]

"When no type of occlusive pessary can be fitted, or when the woman refuses to use one, the only other reliable method is the use of the condom. With proper technic and instruction this method is highly reliable but has many disadvantages which the diaphragm method overcomes."[3]

1. Clinic Reports: Planned Parenthood Services in the United States. Human Fertility 10: 25 (Mar.) 1945.
2. Dickinson, R.L.: Techniques of Conception Control. Baltimore, Williams and Wilkins Co., 1942.
3. Warner, M.P.: J.A.M.A. 115: 279 (July 27) 1940.



A MARK OF Ramses DEPENDABILITY

gynecological division

JULIUS SCHMID, INC.

423 West 55 Street • New York 19, N. Y.

QUALITY FIRST SINCE 1883



Individualized Treatment

for the prophylaxis or
therapeusis of

POLLEN ALLERGIES

★ Pitman-Moore pollen allergens are presented in specially designed individual treatment packages, which permit the dosage to be adjusted to individual sensitivity, a method definitely better than giving every patient the same dosage.

The permanency of these allergens is intensified by the use, in their production, of a special glycero-saline menstruum which insures full potency beyond the expiration date.

An Important Convenience Factor

When the case is of the typical seasonal type, with symptoms appearing annually shortly after the causative plants begin to bloom (grasses in the spring, ragweed in the fall) there is no necessity for making sensitization tests.

Pitman-Moore
Allergenic Extract
GRASS POLLENS
(Mixed) (Bio. 102)
(With sterile diluent)

from the pollens of grasses responsible for most cases of the spring type of pollen allergy ("rose fever"): blue grass, timothy, sweet vernal, Johnson grass and red-top.

(Each cc. of the concentrate contains 10,000 pollen units.)

ACCEPTED AMERICAN MEDICAL ASSN Council on Pharmacy and Chemistry

Pitman-Moore
Allergenic Extract
RAGWEED POLLENS
(Mixed) (Bio. 101)
(With sterile diluent)

from pollens of Giant Ragweed 50% and Short Ragweed 50%.

(Each cc. of the concentrate contains 10,000 pollen units.)

Write for "A Simplification of the Physician's Problem in the Prevention and Treatment of Pollinosis."

PITMAN-MOORE COMPANY

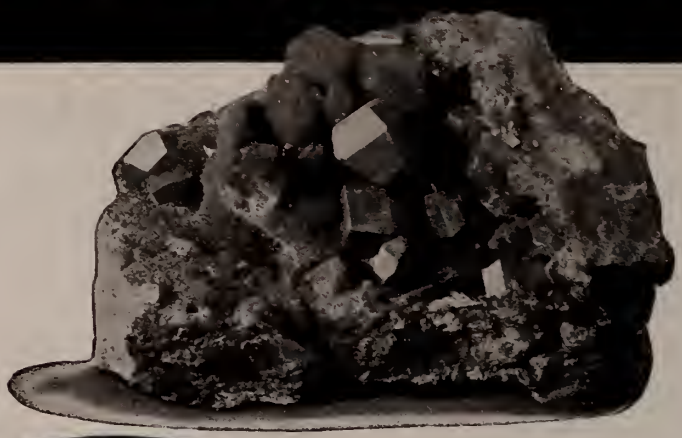
PHARMACEUTICAL AND BIOLOGICAL CHEMISTS

Division of Allied Laboratories, Inc., · Indianapolis 6, Indiana

HYDROSULPHOSOL

Provides all 9 desired requisites as a superior therapy in thermal, acid and caustic burns.

Provides for mechanical exclusion of air at site of burn • Insures prompt relief of pain • Aids in abating burn shock • Bacteriostatic influence • Non-toxic effect • STIMULATES TISSUE REPAIR • Rapidly reduces inflammation and edema • Results in absence or marked reduction of scar tissue • Tends to shorten convalescent period.





HYDROSULPHOSOL is a true solution of sulfur bearing compounds resulting solely from the reduction of flowers of sulfur by a catalytic process. In aqueous solution, it is capable of rapidly releasing its high concentration of sulfhydryl ion (-SH radical) in such form as can be effectively utilized by the body in the synthesis of sulfur-containing amino acids . . . functionally active in cell stimulation and directly related to tissue respiration and repair.

Unlike the sulfa group and many other sulfur compounds, Hydrosulphosol is non-toxic when administered orally or topically applied in heavy concentrations, and will not result in damage to liver and kidney function.

Reprints of scientific papers by authoritative investigators available on request.

AVAILABLE FORMS

AQUEOUS SOLUTION:
Bottles of 8, 4 and 1 fluid ounce.

OINTMENT:
Jars of 1 lb. and 1 oz.

•

ORDER TODAY through your surgical or hospital supplier.

Distributed by
REES-DAVIS DRUGS, INC.
MERIDEN CONNECTICUT



ANNOUNCING

TRIDIONE

REG. U. S. PAT. OFF.

(3,5,5-TRIMETHYLOXAZOLIDINE-2,4-DIONE, ABBOTT)

ABBOTT'S NEW SYNTHETIC ANTICONVULSANT

FOR USE IN PETIT MAL, MYOCLONIC AND AKINETIC SEIZURES IN EPILEPSY

Tridione is Abbott's new synthetic anticonvulsant drug, 3,5,5-trimethyloxazolidine-2,4-dione, which has been demonstrated clinically to have a definite inhibiting effect on petit mal, myoclonic and akinetic seizures in epilepsy.

● Tridione is indicated in the treatment of petit mal, myoclonic and akinetic epilepsy in cases diagnosed by the typical "spike and wave" electroencephalogram or by clinical features alone. It is most effective in idiopathic epilepsy, but it may be used in epilepsy due to organic brain injury if attacks of the types mentioned are present. In certain patients with mixed grand mal and petit mal epilepsy it has been effective as an anticonvulsant in combination with other drugs, particularly phenobarbital.

● Tridione is supplied in 0.3-Gm. capsules in bottles of 100. Literature on Tridione will be mailed on request. Address: ABBOTT LABORATORIES, NORTH CHICAGO, ILL.

REFERENCES: (1) *Richards, R. K., and Everett, G. M. (1944), Analgesic and Anticonvulsive Properties of 3,5,5-Trimethyloxazolidine-2,4-dione (Tridione), Federation Proc., 3:39, March.* (2) *Lennox, W. G. (1945), The Treatment of Epilepsy, Med. Clin. North America, 29:1114, September.* (3) *Lennox, W. G. (1945), Petit Mal Epilepsies: Their Treatment with Tridione, J. Amer. Med. Assn., 129:1069, December 15.*



ERYTHROL TETRANITRATE MERCK in Angina Pectoris

It is generally agreed that the acute attack of anginal pain is most readily relieved by the prompt removal of the provocative factor, and by the use of nitrites. For this purpose, the rapidly acting nitrous and nitric acid esters, amyl nitrite and nitroglycerin, are considered most useful.

For prophylactic purposes—to control anticipated paroxysms—the *delayed but prolonged action* of erythrol tetranitrate is more effective. Erythrol tetranitrate, because of its slower *and more prolonged action*, is also considered preferable for the purpose of preventing nocturnal attacks.

The vasodilatation produced by Erythrol Tetranitrate Merck begins 15 to 20 minutes after administration, and lasts from 3 to 4 hours.

The properly timed administration of a vasodilator having a sustained effect may prevent the following episodes of angina pectoris:

- **The man who finds it necessary to stop and rest when he walks to the train in the morning.**
- **The man who suffers "indigestion" and "gas" on exertion, or after a heavy meal.**
- **The man who has pain in his chest and arms, and weakness upon any anxiety, anger, or nervous strain.**

ERYTHROL TETRANITRATE MERCK
(Erythrityl Tetranitrate)

For Prolonged Vasodilatation

COUNCIL ACCEPTED

MERCK & CO., Inc. *Manufacturing Chemists* RAHWAY, N. J.



PICNIC PLAGUE

DIARRHEA DUE TO FOOD CONTAMINATION, excessive heat, vacation indulgences or change of drinking water is quickly controlled by Kaomagma.

AT THE ONSET give two tablespoonfuls in a little water . . .

. . . FOLLOWED BY one tablespoonful after every bowel movement.



6 AND 12 FL. OZ. BOTTLES

FOR PROMPT RELIEF FROM DIARRHEA

KAOMAGMA

REG. U. S. PAT. OFF.

Kaolin in Alumina Gel

Wyeth

REG. U. S. PAT. OFF.

CLEANSES • COATS • PROTECTS • SOOTHES

WYETH INCORPORATED • PHILADELPHIA 3 • PA.

IT IS
GOOD PRACTICE

. . . in judging the irritant properties of cigarette smoke . . . to base your evaluation on scientific research. In judging *research,* you *must* consider its *source**.

PHILIP MORRIS claims of superiority are based *not* on anonymous studies, but on research conducted only by competent and reliable authorities, research reported in leading journals in the medical field.

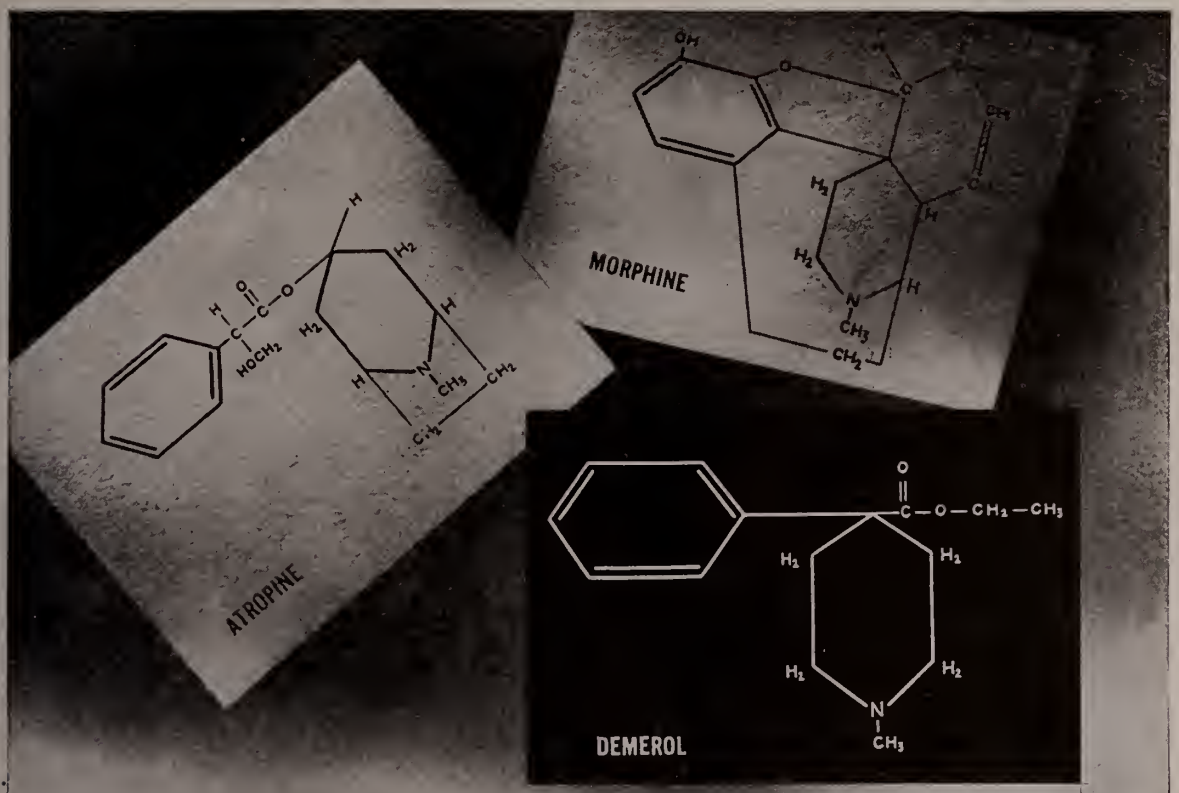
Clinical as well as laboratory tests have shown PHILIP MORRIS to be definitely and measurably less irritating to the sensitive tissues of the nose and throat. May we send you reprints of the studies?

PHILIP MORRIS

PHILIP MORRIS & CO., LTD., INC.,
119 FIFTH AVENUE, N. Y.

*Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60
Proc. Soc. Exp. Biol. and Med., 1934, 32, 241
N. Y. State Journ. Med., Vol. 35, 6-1-35, No. 11, 590-592.

TO THE PHYSICIAN WHO SMOKES A PIPE: We suggest an unusually fine new blend—COUNTRY DOCTOR PIPE MIXTURE. Made by the same process as used in the manufacture of Philip Morris Cigarettes.



Chemical Relationship and Pharmacodynamic Similarity

A NEW SYNTHETIC

ANALGESIC Demerol's analgesic power ranks between morphine and codeine.

SPASMOLYTIC Demerol's spasmolytic action is similar to that of atropine.

SEDATIVE Demerol's sedative effect is mild, but usually sufficient to allay restlessness and induce sleep.

PRACTICALLY NO RISK OF RESPIRATORY DEPRESSION

WRITE FOR DETAILED LITERATURE

DEMEROL
Trademark Reg. U. S. Pat. Off. & Canada
HYDROCHLORIDE

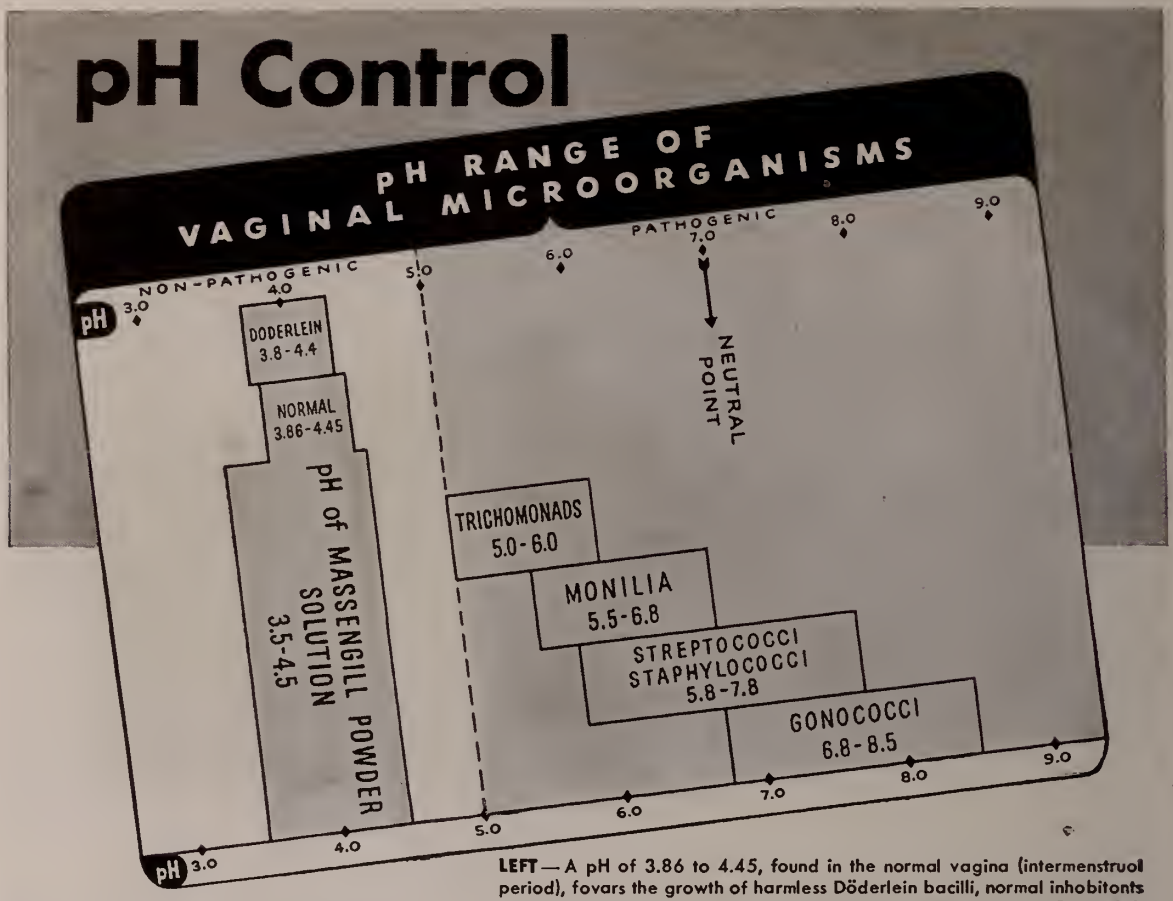
Brand of MEPERIDINE HYDROCHLORIDE (Isonipecaine)

Average adult dose: 100 mg. orally or intramuscularly.

HOW SUPPLIED — For oral use: Tablets of 50 mg., bottles of 25 and 100. For intramuscular injection: Ampuls of 2 cc. (100 mg.), boxes of 6 and 25, and vials of 30 cc. (50 mg. per 1 cc.).

Subject to regulations of the Federal Bureau of Narcotics

WINTHROP CHEMICAL COMPANY, INC.
Pharmaceuticals of merit for the physician • New York 13 N. Y. • Windsor, Ont.



LEFT—A pH of 3.86 to 4.45, found in the normal vagina (intermenstruol period), fovars the growth of harmless Döderlein bacilli, normal inhobitonts of the vaginal tract. Mossengill Powder solution presents a pH of 3.5 to 4.5.

RIGHT—The pH range, 5.0 to 9.0, most favoroble to the development of pathagenic organisms.

SINCE the average woman wants and needs advice regarding a proper douche, her physician is confronted by the problem of choosing an effective preparation which is safe, noncaustic and nonirritating. Massengill Powder may be recommended with assurance because it combines therapeutic efficacy, preventive action and hygienic value, with virtual freedom from irritant properties. Its particular advantage lies in control of vaginal pH.

The normal vagina is protected against the influence of pathogenic organisms by a pH incompatible with their growth. Hence restoration of a normal pH presents the simplest, most direct form of vaginal therapy. Massengill Powder, by providing the desired pH, represents a powerful antibacterial weapon.

Due to its effect upon vaginal pH and to its cleansing action, Massengill Powder solution is equally suitable for regular use in personal hygiene and in the therapy of a wide range of vaginal affections.



MASSENGILL
POWDER

Massengill Powder is supplied in glass jars in 3-oz., 6-oz., 16-oz., and 5-lb. sizes.

THE S. E. MASSENGILL COMPANY
Bristol, Tenn.-Va.

NEW YORK • SAN FRANCISCO • KANSAS CITY

SEMCO

Now – a Council Accepted

ACCEPTED AMERICAN MEDICAL ASSN

TESTOSTERONE PROPIONATE



Obtainable from your usual source of supply in 1 cc ampules, 5 mg., 10 mg., and 25 mg., in boxes of 3, 6, and 50.

Approved literature describing the use of this preparation in recognized indications will be forwarded to physicians on request.

OTHER "RARE" PRODUCTS ACCEPTED FOR ADVERTISING IN THE J.A.M.A.— ACIDOLATE— GITALIN—OPTOCHIN HYDROCHLORIDE—SALYSAL

RARE CHEMICALS

RARE CHEMICALS, INC.
HARRISON, N. J.

84J

TESTOSTERONE PROPIONATE "RARE CHEMICALS"

West Coast Distributors: GALEN COMPANY, Berkeley 2, California



In the distressing disturbances of the menopause, both natural and surgical, administration of the pure, crystalline estrogen THEELIN effectively "tides the patient over" this transitional period until endocrine readjustment occurs. It is also indicated in disorders due to estrogenic deficiency, such as vaginitis, kraurosis and pruritus vulvae.

Theelol Kapseals are available for treatment of the milder menopausal symptoms and for maintenance between injections. Theelin Suppositories, Vaginal, are particularly well adapted for the treatment of gonorrheal vaginitis.

Theelin in Oil is available in ampoules of 0.1, 0.2, 0.5 and 1.0 mg., in boxes of 6 and 50. Theelin, Aqueous Suspension, in 2 mg. ampoules, in boxes of 6 and 25. Theelol Kapseals, 0.24 mg., in bottles of 20, 100 and 250. Theelin Suppositories, Vaginal, 0.2 mg., in boxes of 6 and 50.

THEELIN

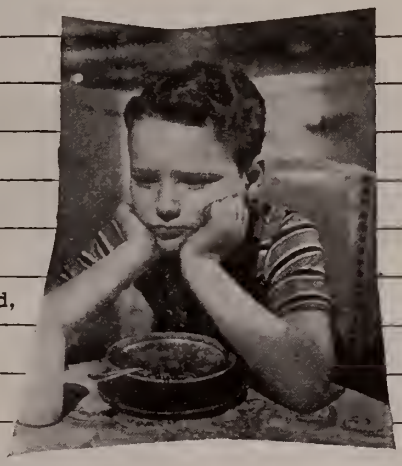
PARKE, DAVIS & COMPANY

DETROIT 32 • MICHIGAN

Commonest pediatric problem:



"My child won't eat"



Even though a child may be undernourished, his appetite often fails. To combat anorexia caused by a lack of important B vitamins, pediatricians increasingly prescribe 'Ryzamin-B' No. 2. Containing the natural B complex as a concentrate of oryza sativa (American rice) polishings, 'Ryzamin-B' No. 2 also supplies potent synthetic B factors. Children enjoy this rich, honey-like, tasty B complex preparation taken directly from the special measuring spoon, as a delicious spread when mixed with jam or peanut butter, or dissolved in milk, fruit juices, favorite beverages. The doctor often solves his commonest pediatric problem with 'Ryzamin-B' No. 2.

Tubes of 2 oz and bottles of 8 oz Each gram contains: Vitamin B_1 (Thiomine Hydrochloride) 1 mgm (333 U.S.P. Units); Vitamin B_2 (Riboflavin) 0.67 mgm; Nicotinomide 6.7 mgm. and other factors of the B complex Gram measuring spoon with each packing.

'RYZAMIN-B' BRAND RICE ~~POLISHINGS~~ CONCENTRATE **No. 2**

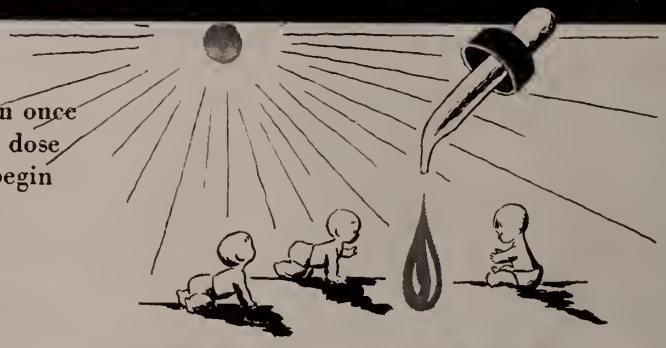
WITH ADDED THIAMINE HYDROCHLORIDE, RIBOFLAVIN, NICOTINAMIDE

'Ryzamin-B' reg. trademark

BURROUGHS WELLCOME & CO. (U.S.A.) INC., 9 & 11 EAST 41ST ST., NEW YORK 17, N. Y.

why vitamin D through the summer?

Because "many infants, when once the oil is stopped, refuse the dose when attempts are made to begin again in the autumn."[1]

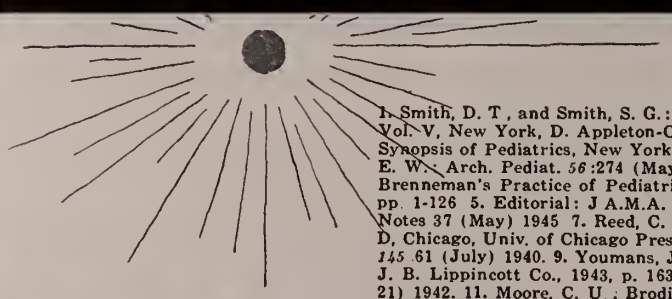


why vitamin D through the summer?

Because the sun is "not to be depended upon"[2]—certainly not in cities[2-4] and not even in such sunny areas as Florida[5, 6] and California.[7, 8]



why vitamin D through the summer?



1. Smith, D. T., and Smith, S. G.: Blumer's Therapeutics of Internal Diseases, Vol. V, New York, D. Appleton-Century Co., 1941, p. 344. 2. Holt, L. E., Jr.: Synopsis of Pediatrics, New York, D. Appleton-Century, 1943, p. 285. 3. May, E. W.: Arch. Pediat. *56*:274 (May) 1939. 4. Eliot, M. M., and Park, E. A.: in Brenneman's Practice of Pediatrics, Vol. 1, Chap. 36, W. F Prior Co., Inc., pp. 1-126 5. Editorial: J A.M.A. *128*:1233 (Aug 25) 1945. 6. Florida Health Notes 37 (May) 1945 7. Reed, C. I., Struck, H. C., and Steck, I. E.: Vitamin D, Chicago, Univ. of Chicago Press, 1939, p. 47. 8. Asher, C.: The Practitioner *145*:61 (July) 1940. 9. Youmans, J. B.. Nutritional Deficiencies, Philadelphia, J. B. Lippincott Co., 1943, p. 163. 10. Jeans, P. C.: J.A.M.A. *120*:913 (Nov. 21) 1942. 11. Moore, C. U.; Brodie, J. L.; Thornton, A.; Lessem, A. M., and Cordua, O B. Am. J. Dis. Child. *54*:1227 (Dec.) 1937.

Upjohn
KALAMAZOO 99, MICHIGAN

FINE PHARMACEUTICALS SINCE 1886

SUPER D CONCENTRATE

Super D* provides natural, potent vitamin D in concentrate, capsule, and liquid forms.

*Trademark, Reg. U. S Pat. Off.







Steadfast . . .

ON UNSHAKABLE FOUNDATIONS

The Borobudur on Java has resolutely survived eleven centuries of unrelenting tropical climate, savage jungle growth and volcanic earthquakes—because of its unshakable foundations. • Likewise, optimum development in childhood is dependent upon a firm nutritional foundation laid in early infancy. • BIOLAC furnishes among other essential nutrients the valuable proteins of milk, an outstanding source of all the indispensable amino acids . . . the prerequisite building blocks of strong tissues. • BIOLAC is bacteriologically safe . . . convenient . . . economical . . . readily available.

BORDEN'S PRESCRIPTION PRODUCTS DIVISION
350 MADISON AVENUE, NEW YORK 17, N. Y.

Biolac

The foundation is the thing!

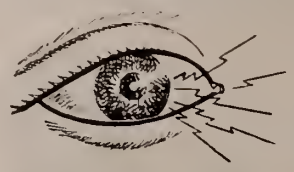


ACCEPTED AMERICAN MEDICAL ASSN.

Biolac is a liquid modified milk, prepared from whole and skim milk with added lactose, and fortified with thiamine, concentrate of vitamins A and D from cod liver oil, and iron citrate; only ascorbic acid supplementation is necessary. Evaporated, homogenized and sterilized. Biolac is available in 13 fl. oz. tins at all drug stores.

Quickly prepared . . . easily calculated: 1 fl. oz. Biolac to 1½ fl. oz. water per lb. of body weight.

Toward a Better World

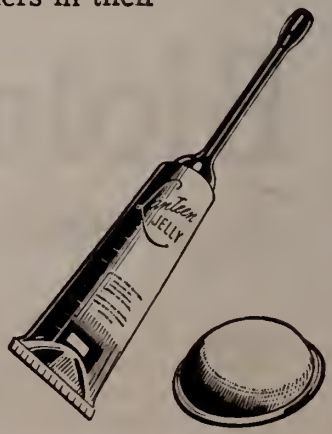


THE ELECTRIC EYE (photoelectric cell) is now used in the bottling of foods and beverages. When virtually invisible foreign particles occur, the beam is broken and the imperfect unit is automatically discarded from the production line—a great scientific advance in safeguarding health.



Another marked example of scientific and sociological advancement is Lanteen Medical Laboratories' promotion of Lanteen products—leaders in their field, produced under the most rigid scientific standards.

Instruction of patients in the use of the Lanteen Flat Spring Diaphragm is simple, and proper placement is assured when largest comfortable size is fitted. Because the diaphragm is collapsible in one plane only, the outer rim cannot be forced into the pubic arch if the entering rim becomes lodged against the cervix. No inserter is required. Advertised exclusively to the medical profession . . . available only through ethical sources. Complete sample package upon request.



L A N T E E N

LANTEEN MEDICAL LABORATORIES, INC. • CHICAGO 10

SPECIFY WITH CONFIDENCE...

Penicillin Troches Schenley — 1,000 units each. Supplied in bottles of 25.



PENICILLIN TROCHES SCHENLEY

With a base which dissolves slowly, and thus gradually liberates penicillin at the site of infection, these troches provide an effective means for treatment of mouth and throat infections due to Vincent's organisms. Penicillin Troches Schenley retain potency over long periods when kept at recommended temperature.

Penicillin Tablets Schenley — 25,000 units each. Supplied in bottles of 20.



PENICILLIN TABLETS SCHENLEY

Buffered with calcium carbonate, these superior tablets are indicated in the treatment of gonorrhea and in the continuing therapy of pneumococcic, streptococcic, and staphylococcic infections after acute phase of infection has been controlled. Stability of tablets permits ambulatory patients to carry with them the required daily dose.

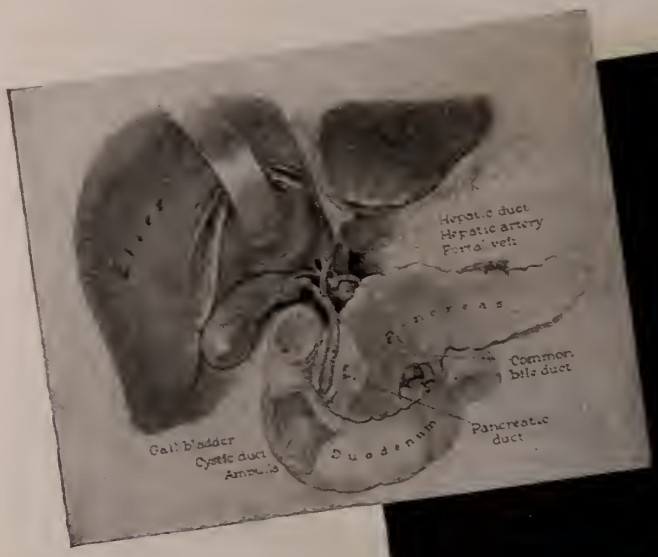
SCHENLEY LABORATORIES, INC.

Executive Offices:

350 FIFTH AVENUE • NEW YORK CITY

Your Local Distributor for **PENICILLIN** SCHENLEY *is:*

CHICAGO	CHICAGO (cont.)	EVANSTON	MOLINE	PEORIA
Chemists Supply Co. Debs Hospital Supplies Illinois Surgical Supply Co.	Sheridan Physicians Supply Co. Thompson Medical Supply	D. S. Lyman, Pharmacist	Otto Schweinberger & Company	Sutliff & Case Co., Inc.



SUPPORTING THERAPY in LIVER DAMAGE

In many stubborn cases support in impaired liver function and hepatic damage is safely attained through the use of

SORPARIN

(Ext. Sorbus aucuparia 'McNeil')

Conspicuous among the outstanding actions of this recently re-investigated botanical are:

- Sorparin stimulates the functioning of liver cells.
- In a large majority of cases Sorparin dispels the indefinite dyspepsias frequently associated with hepato-biliary dysfunction.
- Is not a cholagogue nor a choleretic—may be used in obstructive types of jaundice.
- No known contraindications.
- May be used with safety in combination with bile salts (although these are not required for therapeutic efficacy), with vitamin K, antispasmodics, sedatives or sulfonamides without incompatibility.

CLINICAL INDICATIONS: Hepatitis, with and without jaundice, indeterminate dyspepsias, post-surgical biliary syndrome and idiopathic hypoprothrombinemia. Also useful for mild liver dysfunction secondary to such conditions as chronic cholecystitis, etc.

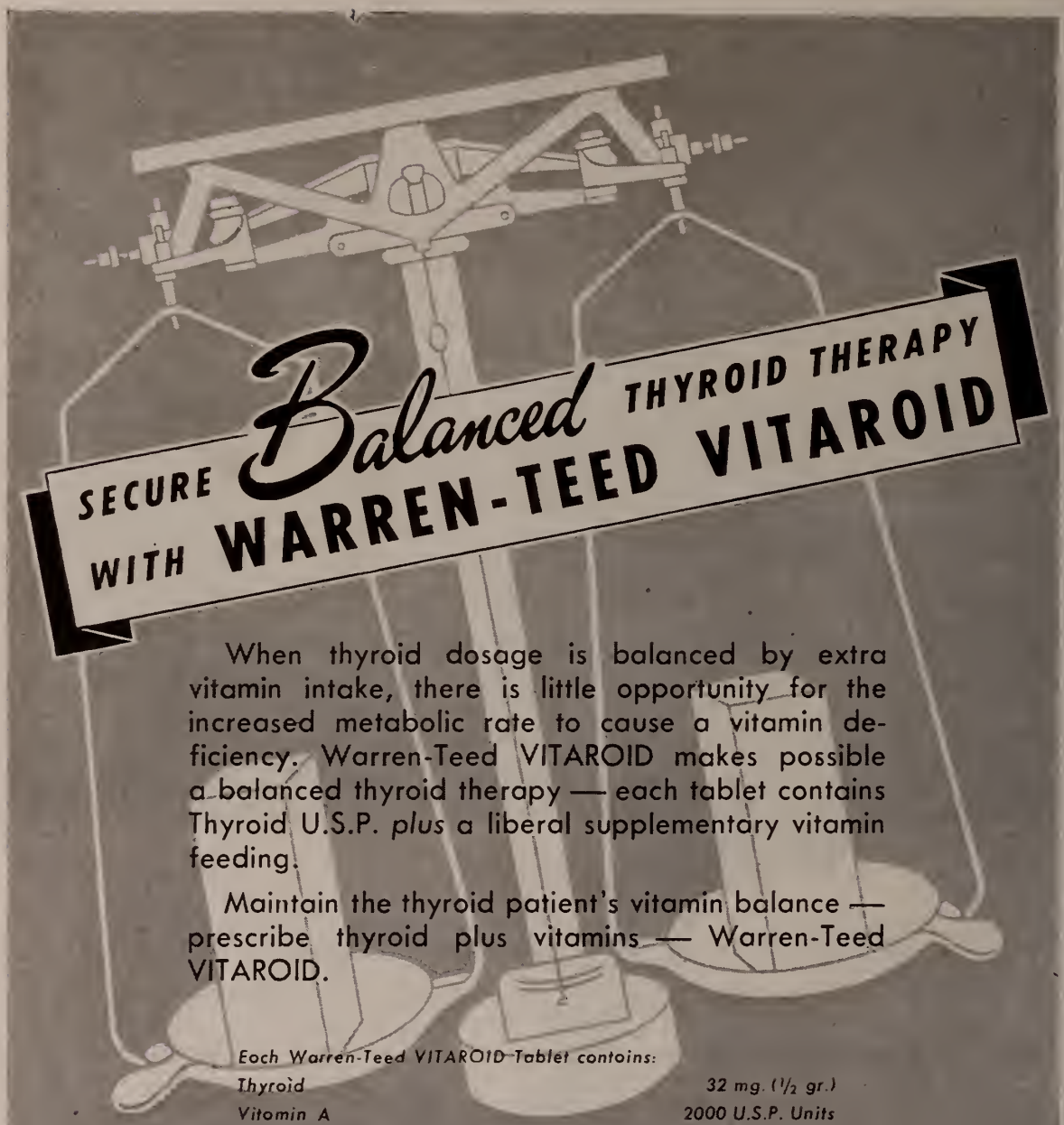
Available in tablets, each containing 3 gr. Sorparin. Bottles of 100, 500 and 1000.
Literature on request.

McNeil Laboratories
INCORPORATED
PHILADELPHIA • PENNSYLVANIA



The efficacy of the diet-alkali management of peptic ulcer cannot be denied. But before rigid dietary restrictions and bed-rest are employed the Larostidin treatment merits your first consideration. Larostidin 'Roche' has been found equally effective by many investigators and it affords the patient a much simpler, more convenient method of obtaining rapid relief. Ulcer patients usually remain ambulatory and on the job during the entire course of 24 daily injections—and even in severe cases, marked relief of pain and other distressing symptoms often follow the first few injections. Supplied in boxes of six 5-cc ampuls... HOFFMANN-LA ROCHE, INC., NUTLEY 10, NEW JERSEY.

FOR THE AMBULATORY TREATMENT OF PEPTIC ULCER **LAROSTIDIN** 'ROCHE'



SECURE *Balanced* THYROID THERAPY WITH WARREN-TEED VITAROID

When thyroid dosage is balanced by extra vitamin intake, there is little opportunity for the increased metabolic rate to cause a vitamin deficiency. Warren-Teed VITAROID makes possible a balanced thyroid therapy — each tablet contains Thyroid U.S.P. *plus* a liberal supplementary vitamin feeding.

Maintain the thyroid patient's vitamin balance — prescribe thyroid plus vitamins — Warren-Teed VITAROID.

Each Warren-Teed VITAROID Tablet contains:	
Thyroid	*32 mg. (½ gr.)*
Vitamin A	*2000 U.S.P. Units*
Synthetic Oleovitamin D (Activated Ergosterol)	*200 U.S.P. Units*
Ascorbic Acid	*15.0 mg.*
Riboflavin	*1.0 mg.*
Thiamine Hydrochloride	*0.5 mg.*
Nicotinamide	*5.0 mg.*

WARREN-TEED

Medicaments of Exacting Quality Since 1920

BY ANY TEST Pharmaceuticals

THE WARREN-TEED PRODUCTS COMPANY, COLUMBUS 8, OHIO

Warren-Teed Ethical Pharmaceuticals: capsules, elixirs, ointments, sterilized solutions, syrups, tablets. Write for literature.

Table of Contents

MAY, 1946
VOL. 89, NO. 5

ORIGINAL ARTICLES

Plastic and Dental Prosthetic Repair of Jaw Injuries, *Com. Paul W. Greeley, USNR and Lt. Com. Albert E. Pound, USNR* 216
The Use of Preserved Blood Plasma in Civilian Practice, *Emmet F. Pearson, M.D.*, Springfield . 221
Intra-Mural Group Psycholotherapy, *J. W. Klapman, M.D.*, Chicago 226
Ochronosis-Like Pigmentation Associated with the Use of Atabrine, *H. Saul Sugar, M.D.*, Chicago, *and Wm. W. Waddell, M.D.*, Beatrice, Nebraska 234
Examination of the Breasts and Pelvic Organs in Apparently Well Women, *Augusta Webster, M.D., M. Alice Phillips, M.D., Luella Nadelhoffer, M.D., Marguerite Oliver, M.D., and Eloise Parsons, M.D.*, Chicago 239

EDITORIALS

Retirement of Olin West 205
Expansion Program for Northwestern University 206
P. R. N., *Charles G. Farnum, M.D.* 54

MEDICAL ECONOMICS

A New Order in the Veterans' Hospitals 209

STATE DEPARTMENT OF PUBLIC HEALTH

Division of Public Health Education, *Jean Christopher, M.S.P.H., Chief* 211
The Division of Tuberculosis Control 213
New Department Appointments 214

CORRESPONDENCE

Discontinuance of Federal Funds for Aid to Enemy Aliens and Others Affected by Governmental Action 215

INDUSTRIAL HEALTH

Psychiatry in Industry, *D. Ewen Cameron, M.D.*, Montreal 242

PHYSICAL MEDICINE ABSTRACTS 247

MEDICINE AND THE ARMED FORCES

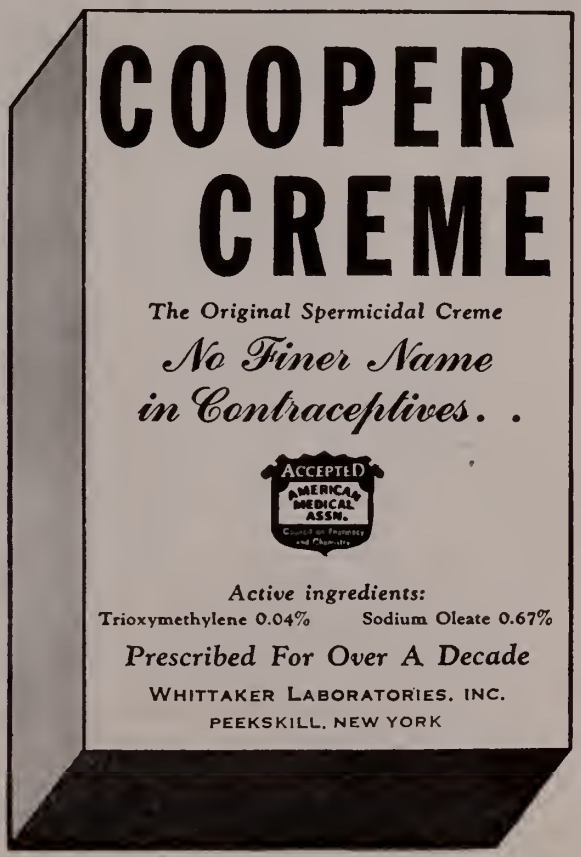
ASTP Program Terminated June First 249
Streptomycin Allocation Program 249
Army Program Prevents Importing of Disease .. 250
Hospitalized Veterans Offered Institute Courses .. 250
Awards and Commendations 251

NEWS OF THE STATE

Coming Meetings, Personals, Marriages, Deaths . 252

IMPORTANT

Send changes of address to 30 N. Michigan Ave., Chicago 2, Illinois, enclosing label from a copy showing your old address. Changes received after the 1st of the month will not go into effect until the following month.





the Mop-up

SCRUBBING the operative field with soap and water effectively eliminates most of the bacteria. But before the surgeon makes his incision, he must be certain that the last troublesome enemy is dispatched. Tincture 'Merthiolate' (Sodium Ethyl Mercuri Thiosalicylate, Lilly), 1:1,000, is especially qualified for the "mop-up" detail. When Tincture 'Merthiolate' is applied, many nonsporulating pathogenic organisms are given the *coup de grâce* on contact. Stragglers which dare to rise from a hair follicle or which fall on the operative field from the air are also exposed to the germicidal action of the film of 'Merthiolate' on the skin. The low toxicity of 'Merthiolate' and its compatibility with body fluids recommend it as a safe, reliable skin disinfectant. Tincture 'Merthiolate' is available in leading hospitals and pharmacies everywhere.

ELI LILLY AND COMPANY • INDIANAPOLIS 6, INDIANA, U.S.A.



Barbiturate group

Through proper selection of the drug, dose, and route of administration, almost any degree of central nervous system depression, from light sedation to deep hypnosis, may be obtained with Lilly barbiturates. In order of increasing duration of action, Lilly barbiturates are listed as follows:

Short Acting . . . 'SECONAL SODIUM' (Sodium Propyl-methyl-carbinyl Allyl Barbiturate, Lilly)
Moderate Duration . . . 'SODIUM AMYTAL' (Sodium Iso-amyl Ethyl Barbiturate, Lilly)
Longer Acting . . . 'AMYTAL' (Iso-amyl Ethyl Barbituric Acid, Lilly)

ELI LILLY AND COMPANY, INDIANAPOLIS 6, INDIANA, U. S. A.



COLOR PHOTOGRAPH BY KARL OESER

Good citizen

THESE are busy times for the man of medicine. Deployment of millions of men long in the public service, adjustment of countless dislocations emanating from the war, re-establishment of normal social and economic structures, all have their effect on the health of the people. Harassed by the demands of an avid public, the physician, in the interest of good citizenship if for no other reason, labors throughout the day and much of the night, longingly hoping for the day when the return of more of his colleagues to civilian practice will give him a small measure of relief.

Neither are these easy times for the manufacturer of drugs and medicines. Shortages of raw materials, readjustment from war to peace, new allocations of personnel, all have added to the burden. Perhaps it is all for the better. New responsibilities bring new opportunities for service, the most gratifying element of all business operations. Eli Lilly and Company, with the support and co-operation of the physicians and pharmacists whom it serves, will continue to make substantial contribution to medical care with particular emphasis on both fundamental and applied research.

A picture of The Good Samaritan provided the inspiration that



eventually led to the founding of Eli Lilly and Company

The Illinois Medical Journal

May, 1946

VOL. 89, NO. 5

Official Journal of the Illinois State Medical Society

EDITOR — Harold M. Camp. EDITORIAL BOARD — James H. Hutton, Chairman, Frederick H. Falls, Josiah J. Moore, Edwin M. Miller, Chauncey C. Maher, Harry S. Gradle, Harry Culver, Walter Stevenson, Raymond W. McNealy.

Editorials

RETIREMENT OF OLIN WEST

Dr. Olin West, who has been secretary and General Manager of the American Medical Association for the past 23 years, retired from his official duties on April 1, 1946.

A native of Alabama, Doctor West graduated from Vanderbilt University Medical School, Nashville, in 1898. He located in Nashville, and maintained a practice in that city for 12 years, during which time he was a member of the teaching staff of Vanderbilt University in the department of chemistry.

In 1910 Doctor West became director for the Rockefeller Sanitary Commission and International Health Board in Tennessee. In 1918 he was selected as the executive officer of the Tennessee State Board of Health, resigning that position in 1922 to become field secretary for the American Medical Association. In 1923 he became Secretary of the American Medical Association, and the following year upon the retirement of Dr. George H. Simmons, accepted the additional responsibilities of General Manager for the A. M. A., and has been re-elected each year as Secretary-General Manager until his own retirement on April 1.

Doctor West has occupied this important position during the most trying times in the history of the organization, devoting more than 23 years in behalf of the Association and the development of American Medicine. Having been secretary of the Tennessee State Medical Association and editor of its journal while residing in that state, he developed a background which made him eminently fitted for the arduous duties which were later his, over this long period of nearly a quarter of a century.

There is probably no one in medicine today in this country who has made so many friends and is able to call them by name as Doctor West, and all of them regret that he deemed it advisable to offer his resignation. However, the physicians of America as a whole will extend best wishes to Doctor West at this time, and hope that he will enjoy many years of good health in his well deserved vacation period.

The Board of Trustees of the American Medical Association appointed Dr. George F. Lull as Secretary-General Manager to fill the unexpired term of Doctor West. Doctor Lull, who has acted as Deputy Surgeon General of the United States Army during the recent war, and who had been in the Medical Corps for many years, is well qualified for those duties which he has recently acquired.

Doctor Lull was graduated from the Jefferson Medical College, Philadelphia, in 1909, and was appointed as Assistant Secretary and General Manager of the A. M. A. following his retirement from the Military, on January 1, 1946. The medical profession of this country is most fortunate indeed to have a man of his rare ability

available at this time, to succeed a man who has carried on for so many years, and those of us who are acquainted with Doctor Lull are thoroughly impressed with the fact that he will continue to carry the torch in a most satisfactory manner.

The Illinois State Medical Society, of which Olin West has been a member for many years, will extend a permanent invitation to him to meet with us on every possible occasion, now that he has been relieved of his arduous and ever confining duties, and should have more time available to renew old friendships and make many new ones.

EXPANSION PROGRAM FOR NORTHWESTERN UNIVERSITY

Franklyn B. Snyder, president of Northwestern University, recently announced a plan of development for the Chicago campus, which among other things would materially increase the facilities of the medical school, and aid materially in perpetuating the well established idea that Chicago is really the medical center of the entire world. Major emphasis is to be placed on medical research, and it is proposed to add 10 new buildings, which it is estimated will require a sum ranging from $63,000,000 to $95,000,000.

In commenting on this proposed development, president Snyder said, "The city of Chicago should and can become the world leader in medical research. From this city came the impetus that founded such organizations as the American Medical Association, The Illinois State Medical Society, The American College of Surgeons and The American Neurological Association." Commenting further, president Snyder said, "Chicago has pioneered in improving the standards of medical education, and has contributed outstandingly to medical research. It is said to be the only city in America and in the world with three dental schools, and its four approved medical schools are exceeded in number by the medical schools of only one other city in the country. With the additional resources to be made available when Northwestern's plans are realized, Chicago will attain unquestioned leadership in medical education and research."

ILLINOIS STATE MEDICAL SOCIETY

GENERAL OFFICERS, 1944-1945

PRESIDENT ..... EVERETT P. COLEMAN, Canton
PRESIDENT-ELECT ..... ROBERT S. BERGHOFF, Chicago
1ST VICE-PRESIDENT .... HARRY M. HEDGE, Chicago
2ND VICE-PRESIDENT .... WALTER C. BLAINE, Tuscola
SECRETARY-TREASURE .. HAROLD M. CAMP, Monmouth

THE COUNCIL

L. J. Hughes	1st	District, Elgin	1944
E. C. Cook	2nd	District, Mendota	1944
Oscar Hawkinson	3rd	District, Chicago	1946
Percy E. Hopkins	3rd	District, Chicago	1944
E. W. Mueller	3rd	District, Chicago	1945
Chas. P. Blair	4th	District, Monmouth	1946
Ralph P. Peairs	5th	District, Normal	1946
Walter Stevenson	6th	District, Quincy	1945
I. H. Neece	7th	District, Decatur	1946
C. E. Wilkinson	8th	District, Danville	1946
Andy Hall	9th	District, Mt. Vernon	1945
G. C. Otrich	10th	District, Belleville	1945
Ed. S. Hamilton	11th	District, Kankakee	1944
Edward H. Weld	At	Large, Rockford	1946
Chas. H. Phifer	At	Large, Chicago	1945

Chairman of the Council.....Percy E. Hopkins

ILLINOIS MEDICAL JOURNAL

Harold M. Camp, Monmouth.....Editor
L. E. Malley, Chicago....Managing Editor & Business Mgr.

GENERAL COUNSEL

Edward W. Rawlins.....77 West Washington St., Chicago

LEGISLATIVE COMMITTEE

James H. Hutton, Chairman....30 N. Michigan Ave., Chicago

EDUCATION COMMITTEE

R. R. Ferguson, Chairman..4013 N. Milwaukee Ave., Chicago
Miss Jean McArthur, Secretary.30 N. Michigan Ave., Chicago

PERMANENT COMMITTEE ON ARCHIVES

D. D. Monroe, Chairman.....Alton
C. E. Black.....Jacksonville
P. J. McDermott.....Kewanee

SCIENTIFIC SERVICE COMMITTEE

Robert S. Berghoff, Chairman..30 N. Michigan Ave., Chicago
Harold M. Camp, Secretary.....Monmouth

JOURNAL COMMITTEE

Percy E. Hopkins, Chairman.....800 W. 78th St., Chicago
Harry J. Stewart, Secretary.....715 Lake St., Oak Park

Outside of editorial or allied views or statements that are the authoritative actions of the Illinois State Medical Society, the organization denies responsibility for opinions and statements published in the ILLINOIS MEDICAL JOURNAL. Views expressed by the various authors and views set forth in various departments in the JOURNAL represent the views of the writers.

State Society will pay no bills for legal services except those contracted by the Committee. Notify the Chairman at once. Do not employ attorneys.

Send advertising copy, cuts and all communications relating to advertising to ILLINOIS MEDICAL JOURNAL, 30 N. Michigan Avenue, Chicago.

Original articles and membership correspondence to Dr. Harold M. Camp, Monmouth, Ill.

Society proceedings and news items and changes in the mailing list to Managing Editor, 30 N. Michigan Ave., Chicago 2, Illinois.

Subscription price of this JOURNAL to persons not members of the Illinois State Medical Society is $3.00 per year, in advance, postage prepaid, for the United States, Cuba, Porto Rico, Philippine Islands, Hawaiian Islands and Mexico. $4.00 per year for all foreign countries included in the postal union. Canada, $3.50. Single current copies, 50 cents.



Robert S. Berghoff, M.D.
President, Illinois State Medical Society
1946 - 1947

The major project in the Northwestern Medical Center is an institute for medical research that will undertake investigation into the many unsolved problems of medicine, and especially in the field of the degenerative diseases, such as cancer, heart diseases, arteriosclerosis, kidney diseases, and other similar ailments. This institute calls for a 20 story building, which will cost approximately $6,000,000. An endowment of $12,000,000 is proposed to maintain this department and get the proper type of medical investigators with an aptitude for research.

Other projects envisioned in the recent announcement include a Neuropsychiatric Clinic, a Cancer Clinic, An Eye Hospital, a Women's Hospital, a Children's Hospital, Urological Institute, a School of Nursing, a University Clinic and an expansion of a General Hospital. These nine additional buildings will cost approximately $16,800,000 and they will all be staffed with the best men to be found for teaching and research in the various specialties.

In addition to these proposed additions to the Medical School on the Chicago Campus, are increased facilities for research in law, dentistry, business, government, and aeronautics. A central library is also to be provided, which will require a special building and serve the whole campus, in place of the fine individual libraries in each of the professional schools at the present time. It was stated by president Snyder that to complete this vast project will probably require twenty-five years.

With the vast expansion program for the University of Illinois College of Medicine, it is quite obvious that within years to come, Chicago will enjoy an unusual prestige as a medical center, and most likely the outstanding research center of the world.

SOIL CONSERVATION READING MATERIAL FOR WAITING ROOMS

Everyone likes to eat. He wears clothes. He lives in a house made entirely or partly of wood. If he is a manufacturer he uses water or raw products from the soil. If he is a doctor, lawyer, or insurance salesman, the majority of his clients depend directly or indirectly on soil and water for their livelihood. Therefore, everyone is interested in soil and water conservation — whether he knows it or not.

Erosion has ruined for crop production 50 million acres of land in the United States and severely damaged another 150 million acres. Erosion fills streams and reservoirs with silt, makes floods worse, and has impoverished whole communities.

But the picture is not hopeless. Farmers are starting to win the fight against erosion with the help of local soil conservation districts. District governing bodies of local people elected by the farmers run the district, plan their own programs and get needed help from various federal and state agencies.

Many people don't know these things until they read about them. Then they get interested, because the facts are astounding. All of this suggests a new kind of reading material for doctors' waiting rooms. Interesting, instructive material is available from various agencies including the U. S. Soil Conservation Service which can furnish, without cost, illustrated booklets. Every doctor, whether in a city or rural area, can improve his reading material for patients by including some of these soil and water conservation publications. A monthly magazine, "Soil Conservation" is available from the Superintendent of Documents, Washington, D. C. for $1 a year.

A packet of materials will be sent doctors who request it. Address all requests to: Mr. B. B. Clark, Soil Conservation Service, 1204 W. California, Urbana, Illinois.

Medical Economics

The Medical Economics Committee — Chauncey C. Maher, Chmn., 6 North Michigan Avenue, Chicago, Edwin S. Hamilton, V. Thomas Austin, Emmet B. Bay, Jay McDonald Milligan, Jacob M. Mora, George Halperin, Marie Wessels, Thomas C. Browning, Roland R. Cross, Milton E. Bitter, Edwin F. Hirsch, Ford Hick, Lt. Col. MC, William J. Bryan, John R. Vonachen.

A NEW ORDER IN THE VETERANS' HOSPITALS

Much has been written in the past weeks in the public press and in the medical journals about the changes to occur in the Veterans Administration. Few laymen or physicians question the desirability of a new order.

After World War I, the Veterans' Hospitals were organized and staffed with medical officers, then recently demobilized. Some of them remained within the Veterans' institutions, and others resigned to engage in a more productive private practice. The new personnel, entering the Veterans' Service in the decade just preceding World War II included a few young physicians who made outstanding records in their medical schools or hospitals as interns or residents. Older physicians attracted to the service were not of the highest order. On the administrative side, the executive officers from General Hines down to the lesser officers received considerable criticism from the public press for their inefficiency.

President Truman recently accepted General Hines' resignation and later appointed General Omar Bradley as chief executive officer of the Veterans' Administration. Major General Paul R. Hawley has been appointed Chief Medical Officer and later Dr. Paul B. Magnuson of Chicago was made director of Research and Education. Action from these new appointees was not delayed. In the December 25th issue of the J.A.M.A. (Volume 129, Number 16, page 1100) there is documentation of a plan "for cooperation between the teaching institutions and the Veterans' Hospitals," which is the core of the new order to improve the defects of the old regime.

Briefly, the new medical program consists of the appointment of "ward officers-residents" upon recommendations of approved local "deans committees" (from medical schools adjacent to Veterans' Hospitals), from "discharged junior medical officers who wish to prepare for their boards in various specialties," at salaries of $3640 per year. Consultants or "attending men" are to be appointed by the deans committees from the staff of local medical schools. Their salaries are to be computed on a per visit basis, not to be exceed $500.00 per month or $6,000 per year. Senior consultants (present consultants), already existing, are to remain intact and fitted into the general plans or replaced. Salaries are to depend upon the amount of time spent and the kind of work performed.

In the January 5th issue of the J.A.M.A. (Volume 130, Number 1, page 38) an analysis of enabling legislation (H.R. 4717) appears. The bill provides a new department with a Chief Medical Director, and eight assistant medical directors, with salaries of $13,000 and $11,000 per year respectively, with other personnel including nurses, pharmacists, dieticians, physical therapists, and others. In the medical service there are to be six grades with salaries ranging from $3640 per year to a maximum of $9800. Appointments will be made by the Administrator "only after qualifications have been established . . . and without regard to civil service requirements."

The qualifications for eligibility include citizenship of the U.S., a degree of doctor of medi-

cine, or doctor of osteopathy, from a college or university approved by the administrator, and a license to practice medicine, surgery, or osteopathy. Specialist ratings are indicated as those of the existing American Boards.

The new order in the Veterans' Hospitals has many significant portents. For the veterans, better medical care should certainly be available immediately by the improvement in administration and medical personnel. There is every reason to believe that the deans committees will select the medical residents, consultants and senior consultants on the basis of merit. That the Medical Director and his assistants will remain free from political influence in the oncoming years is a fervent hope. Already, however, there is a sinister note of political lobbying in the Bill, as one reads that a degree of osteopathy is included in the eligibility rating.

The new regime is advantageous to the medical schools as they are presented with many new teaching beds with no expense of maintenance for training residents in their respective specialties. Rapid expansion of post-graduate education in the specialties under direct medical school supervision may be expected. The Veterans' Hospitals, however, do not provide all types of patient material for adequate training and in the past, there has been an over-abundance of the functional groups known to the veterans of the last war as well as this one as "goldbrickers." There is still the possibility that the attending men and consultants, even though on a part-time basis, will become institutionalized, stale and uninspiring as physicians and teachers. Part-time medical officers have too often given too much of their imagination and their energy to private endeavor and have regarded their institutional appointments a sinecure.

The increased number of residencies available with desirable salaries while in training suggests a remarkable increase in the number of specialists within the next decade, and a corresponding decrease in the number of general practitioners. It follows that there will be more severe competition between the general practitioner and the specialties if the latter enter practice in the small cities or group themselves in county seat clinics.

The new order in the Veterans' Hospitals has been well inaugurated, and should function effectively if competence, merit and ability are the fundamental factors upon which appointments are made and maintained.

C.C.M.

CONVALESCENT SERUM AND PENICILLIN BEST FOR SCARLET FEVER

A navy physician has found that simultaneous injections of human convalescent scarlet fever serum and penicillin provide the best means for treating scarlet fever.

Lieut. Comdr. Paul Ashley (MC), U.S.N.R., writing in the March 23 issue of *The Journal of the American Medical Association,* says that within 24 hours after the appearance of the rash the patients should have convalescent scarlet fever serum injected into their veins and 30,000 units of penicillin injected into the muscles. Thereafter, they should receive 15,000 units of penicillin every three hours until their temperature has remained normal for five days.

Comdr. Ashley states that the patients responded to this treatment better than to that of any other tried, regardless of the severity of the illness.

The blood serum comes from patients who are convalescent from scarlet fever and, when introduced into the body, it produces immunization by virtue of the antibodies which it contains. These antibodies are specific substances which react against an invading micro-organism.

Comdr. Ashley's report was based on 298 patients who were studied in groups of approximately 50 to compare different types of treatment.

The author says that from 50 to 60 per cent of the cases of scarlet fever observed were caused by certain types of group A beta-hemolytic streptococci which are resistant to the sulfonamides. Therefore, the author cautions against the use of sulfadiazine in the treatment of such patients.

State Department of Public Health

DIVISION OF PUBLIC HEALTH EDUCATION

JEAN CHRISTOPHER, M.S.P.H., CHIEF

I. *History of the Division.*—Even in the days when State public health service in Illinois was carried on through the functioning of a State Board of Health certain health educational activities were instituted. Bulletins and reports were published and as early as 1915 beginnings had been made toward the establishment of a motion picture film library.

Under the provisions of the Civil Administrative Code the State Department of Public Health was organized in 1917 with the Division of Public Health Education as one of its ten divisions. Its purpose as described in the January, 1918, publication of "Illinois Health News" was to "correlate all of the divisions of the Department and serve as a mouthpiece for bringing information to the public from all of these divisions." To this end it maintained a large public health exhibit of models, panels and posters for fairs; furnished motion pictures on public health subjects to communities; published a popular health bulletin monthly; maintained a press service; supplied public speakers; and developed a circulating library of technical books.

II. *What Are the Present Functions?*—Today the Division of Public Health Education is still the unit of the Illinois Department of Public Health primarily charged with carrying out the legal requirement that the Department "promote the information of the general public in all matters pertaining to public health" and "print, publish, and distribute documents, reports, bulletins . . . . and other matter relating to the prevention of diseases, and the health and sanitary conditions of the State." To this end the various health educational tools described above are used. There has been, however, a decided trend for the personnel of the Division to work more intensively with *people* in various areas of the State. The purpose of the Division might then be briefly stated as attempting "to create a better and more widespread understanding of good health and ways of obtaining it; and to so stimulate individuals that they will translate recognized health practices, both individual and community, into terms of action."

As examples of this type of approach, the Division of Public Health Education has cooperated closely with the following groups in an effort to create a sound understanding of the practices that lead to better health for the individual and for the entire community: (1) the Illinois Statewide Public Health Committee; (2) the Illinois Joint Committee on School Health; (3) lay and professional groups; and (4) local health departments in the training of community health educators.

1. Following a survey of Illinois needs by the American Public Health Association it was recommended that a non-partisan and self-perpetuating Statewide Public Health Committee be established for the educational purpose of developing widespread understanding among the people as to what the public health problems are and what the solutions might be. It was further recommended that personnel from this Division be loaned to such a Committee and one of its members serves as the executive secretary. Mr. Benjamin Wham, Winnetka, is the present chairman of the Illinois Statewide Public Health Committee with Mrs. Guy Tawney, Urbana, as

Co-chairman. An executive Board of some forty state agencies plus other members at large and thousands of interested members throughout the State comprise the organization. The Committee was active in the passage of the permissive legislation for county health departments as incorporated in the Searcy-Clabaugh law and have been continually interested in the promotion of full-time local health services in the various counties. In addition to the personnel previously mentioned, the Division of Public Health Education has prepared special materials for the use of Illinois Statewide Public Health Committee members.

2. The Illinois Joint Committee on School Health, of which Dr. Roland R. Cross is chairman, is composed of the administrative heads of the three State agencies responsible for public health, public education and teacher training. In addition to the State Superintendent of Public Instruction, the Director of the State Department of Registration and Education, and the Director of the State Department of Public Health, there is a membership of about fifty leaders in health, medicine and education representing some twenty official and non-official agencies.

Functioning through a smaller Liaison Committee and ten sub-committees two reports were prepared. The first is addressed primarily to universities, colleges, and normal schools, and is entitled: "A Basic Plan for Student Health and Health Education in Teacher-Training Institutions." The second report is designed for the use of local school committees and local citizens' committees interested in planning or revising their school health and health education programs. This report is entitled: "A Basic Plan for Health Education and the School Health Program." It indicates the scope, nature, and specific objectives of an adequate program and offers a framework for the facilitation of local planning.

To assist in the implementation of these reports by better preparing teachers in Health knowledge and methods, the Division of Public Health Education was instrumental in the setting up of a Workshop in 1945 at Illinois State Normal University. Follow-up of the teacher participants was made by a staff member of the Division of Public Health Education.

This year, plans for two such workshops are in progress to be held at Illinois State Normal and Southern Illinois Normal Universities. Administrators as well as teachers will be encouraged to attend with stipends again provided for the eight week session by the United States Public Health Service.

3. A few of the cooperative projects engaged in the lay and professional groups are mentioned herewith: Following a training course at Bethesda, Maryland, in 1945, for the State health chairmen of the Illinois Federation of Women's Clubs, the Illinois Public Health Chairman, Mrs. Frank J. Christenson, approached Dr. Cross for assistance from his Department in the planning of two public health institutes. Arranged by the Division of Public Health Education, the institutes were scheduled in Chicago and Springfield last October for the women from the northern and central and southern regions of the State. These were held in conjunction with the Illinois Congress of Parents and Teachers whose health chairman is Mrs. Everett F. Butler. Since that time the district presidents and public health chairmen encouraged similar meetings in various localities throughout the State in which Department personnel also assisted.

In conjunction with the University of Illinois Extension Service and the Office of Public Instruction, eight Community Relations Seminars have been held recently to interpret the value of full-time local health services including adequate school health programs and ways of obtaining them.

4. As the success of a community health program is very largely dependent upon public understanding and cooperation, it is now recommended by public health authorities that persons with graduate training in health education be included as essential members of the staffs of full-time local health departments. Since 1943, the Division of Public Health Education has therefore been sending to approved Schools of Public Health each year on all-expense scholarships a limited number of carefully selected applicants. Following their year's training and subsequent employment on the staff of local health departments, the Division of Public Health Education has provided consultant serv-

ice to the personnel in the field and has arranged conferences at regular intervals.

The work of the community health educators differs depending upon the local health problems but they invariably act as a liaison person between the technical staff of the health department and the various community groups. Depending upon local needs and interests they have assisted in the formation of classes for expectant mothers; courses for food handlers; educational programs preceding mass X-ray of certain groups in the community; the formation of school health councils and/or the establishment of community health councils, etc.

III. *Services to the Physicians.*—The Public Health Library of the Division of Public Health Education circulates upon request scientific journals, periodicals and book to members of the medical, dental and nursing profession in the State. A list of some seventy periodicals as well as a catalog of books on a variety of health topics are available upon request. The Division has recently prepared "A Manual for Physicians Returning from Service," which includes information on the various programs and services of the Illinois Department of Public Health.

In cooperation with the Education Committee of the Illinois Medical Society, the Division of Public Health Education has produced special literature for the physicians on endocrinology, ophthalmology and other subjects.

In areas with full-time local health departments, the local medical societies have been particularly appreciative of the services of a local health educator realizing that the foundation of positive health lies in a community program whose basis is health education.

IV. *Summary.*—As the Division of Public Health Education is primarily a service Division, it is sometimes difficult to separate its work from that of the various groups which it serves. Examples, however, have been included in the preceding paragraphs. Suggestions will be welcomed from the various practicing physicians throughout the State as to how the Division might be of additional service.

In tuberculosis the first and greatest need is education; education of the people and through them education of the state. Edward Livingston Trudeau.

THE DIVISION OF TUBERCULOSIS CONTROL

The first Division of Tuberculosis was established as part of the State Department of Public Health shortly after the adoption of the Civil Administrative Code by the State Government in 1917.

While, because of a very limited appropriation, most of the fight against tuberculosis was carried on by "other governmental and extra-governmental" organizations, the Division was "responsible for carrying out those functions that only the State Department of Public Health is prepared and authorized to do . . ." These functions included, according to the Fourth Annual Report of the Department of Public Health:

1. The examination of plans for county tuberculosis sanatoria construction. Such plans must, according to law, be approved by the State Department of Public Health prior to their utilization.
2. The inspection of sites chosen by counties for the erection of sanatoria. This work has been done through the assistance of the sanitary engineers of the department.
3. The inspection of existing municipal and county tuberculosis sanatoria with especial reference to their sanitary conditions and their fitness for the purpose for which they were built.
4. The preparation and enforcement of uniform rules and regulations for the control of pulmonary tuberculosis.
5. Joint supervision over the placement and activities of community and county public health nurses.

The Eleventh Annual Report of the Department describes a survey made of "sanitariums" during the fiscal year ending June 30, 1928. The following are some observations:

The municipal tuberculosis law was approved July 1, 1908, and the Chicago Municipal Sanitarium was authorized by vote in 1909 and opened for patients in 1915. The county tuberculosis law was approved July 1, 1915, and was voted on in 1916 for LaSalle County. The sanitarium was opened in 1919 being the first county sanitarium to open in Illinois under the Glackin law. . . .

The Glackin law does not provide for the control of tuberculosis from a public health standpoint and while most of the institutions are cooperating with the State Department of Public Health for control of tuberculosis, still not nearly enough is being done even in the 48 counties operating under the Glackin law to prevent the spread of the disease to others and especially to children. . . .

The point we want to make here is that at least one-eighth of one per cent of the population of Illinois, which is about 7,314,000, or approximately 85,000 people either have tuberculosis or are suspected of

having this disease; or from their contact with open cases, they should be observed for fear they will contract the disease.

The activities of the Division apparently became less of an entity as time went on, and in the thirties no summary of activities of the Division appeared in the annual reports. It still retained its functions as "official observer" but ceased to be a factor in direct tuberculosis service in the State.

However, it became obvious to those in charge of the Department that the State should have a separate Tuberculosis Division having official authority to aid in the control problem of tuberculosis. Accordingly, provision was made in the Department's appropriation in 1939 for a Division of Tuberculosis Control. Note the difference in title. However, nothing was done toward the creation of this Division, and in 1941 appropriation was again made for a Division of Tuberculosis Control. This Division was finally established and began to function as a separate Division of the State Department on February 1, 1942. The creation of this Division completed the executive staff of the State Department of Public Health for each of the fifteen administrative divisions as they are set up in the new organization plan of the Department.

A full-time chief was appointed. A committee composed of men well versed in tuberculosis problems was appointed by the Governor to act in an advisory capacity. This committee has been of great value to the Department and the Division. The following were early accomplishments:

1. Educational Health Circular No. 65 on TUBERCULOSIS was rewritten and brought up to date.

2. A new punch card for filing tuberculosis morbidity and mortality records was set up.

3. A punch card for the reporting of sanatorium admissions and discharges was developed. This card supplies the Department with information not hitherto available.

Together, the two above-mentioned cards allow for better allocation of cases and deaths.

4. A set of standards was created for the purpose of certifying sanatoria. The State has no power over public or private institutions, except for the obligation of inspecting them periodically. The certification is on a voluntary basis, but most of the sanatoria in the State have made application for certification. The original standards, which are reasonably low, are to be revised upward from time to time.

5. An x-ray reading service for physicians was established and is gradually being enlarged. Films may be sent in by private physicians with a request for reading, and group films resulting from tuberculosis surveys are also read. This service was established to be of aid to the physicians, now under pressure due to the depletion of men in private practice, and to lessen the burden of the sanatorium men who have been previously doing work of this kind.

6. A system of sanatorium vacancy reporting has been inaugurated, whereby biweekly reports are sent to sanatorium boards (not maintaining sanatoria) and other interested organizations, indicating the rate per week and the number of beds vacant, in sanatoria outside of Cook County, for both male and female patients. This service is intended to provide sanatorium boards with up to date information so that patients may be hospitalized as expeditiously as possible.

NEW DEPARTMENT APPOINTMENTS

Lieutenant-Colonel G. Howard Gowen has been appointed to the position of Chief of the Division of Cancer Control, effective March 1, 1946. Dr. Gowen, a native of Illinois, served with the Army Medical Corps for three years including duty in Africa, Italy, and Western Europe with the invasion armies. A graduate of the Medical College of the University of Illinois, he served as an epidemiologist on the staff of the State Department of Public Health in 1936 and 1937. Therafter Dr. Gowen served as health officer of Champaign-Urbana, as administrative assistant in the Chicago Board of Health and as a member of the faculty of the Graduate School of Public Health at the University of Michigan.

Effective March 9, 1946, Lieutenant-Commander John F. Shronts has been appointed to the position of Chief of the Division of Industrial Hygiene. Dr. Shronts is also a native of Illinois and is now on terminal leave after four years' service with the Navy Medical Corps. Prior to entering the Navy, he was a district health superintendent for the State Department of Public Health with headquarters at Woodstock. He graduated from the Medical College of North-

(*Continued on page 246*)

Correspondence

DISCONTINUANCE OF FEDERAL FUNDS FOR AID TO ENEMY ALIENS AND OTHERS AFFECTED BY GOVERNMENTAL ACTION

Dear Dr. Camp:

On and after July 1, 1946 the Federal funds which have been administered in Illinois by the Illinois Public Aid Commission, at the request of the Social Security Board, for assistance to Enemy Aliens and Others Affected by Governmental Action will no longer be available. As you may know, a large number of Japanese and Japanese-Americans relocating to this area, as well as some Germans and Italians, have received temporary assistance through these funds from time to time during the past four years. The Illinois Public Aid Commission still is receiving requests for temporary assistance in emergencies from such persons, requests for payment of medical expenses being the most frequent.

Since this federal program of assistance is being discontinued as of July 1, 1946, all bills incurred by the above mentioned persons, for which payment from the Illinois Public Aid Commission is expected, must be presented to the Commission not later than June 15, 1946. The Illinois Public Aid Commission expects to give this information to individual agencies and medical and dental practitioners with whom it now has active business relations with reference to a particular individual. It is the Commission's desire, however, that this information be made available to all hospitals, agencies and practitioners in Illinois. To this end, I wonder if I might ask you, as Secretary of the Illinois State Medical Society, to announce the date of discontinuance of this program and the date by which all bills must be presented to the Illinois Public Aid Commission for payment at the next meeting of the society, to insert it in any printed publication of the Society, and to give it what ever other form of publicity you may consider desirable and necessary. In this connection, it should be emphasized that only those bills for which the Illinois Public Aid Commission has accepted responsibility prior to presentation can be considered for payment.

I should like to take this opportunity to express appreciation, on behalf of the Illinois Public Aid Commission, for the fine cooperation which the Commission has received from hospitals and practitioners in carrying out the administration of this program during the past four years.

I shall appreciate very much your cooperation in this matter.

Very truly yours,
Raymond M. Hilliard
Public Aid Director

Whatever success has been thus far achieved in controlling tuberculosis is a direct contribution of organized medicine to the welfare of the human race. Critical and querulous comment is rather too commonly heard, charging the medical profession with dereliction of its duty in not suspecting and therefore discovering tuberculosis in its earliest or minimal stage. This criticism is largely unfair, since it is only through the X-ray that the disease can be discovered thus early. Although the X-ray has been in use for a good many years, facilities for its adequate application have only recently been generally distributed. From now on it will take the place it deserves as our outstanding diagnostic medium and be used without limitation by internists everywhere. Kendall Emerson, M.D. Hoosier Health Herald, February, 1946.

Original Articles

PLASTIC AND DENTAL PROSTHETIC REPAIR OF JAW INJURIES

Captain Paul W. Greeley,
(MC), U.S.N.R.
and
Commander Albert E. Pound,
(DC), U.S.N.R.

Since the group commonly referred to as "jaw injuries" offers many varied surgical and dental challenges, a very close cooperation is necessary between the plastic and dental surgeons. In our hospital, we have been extremely fortunate in having met this requirement, both from the standpoint of available skill and spirit to accomplish the best end result for each case as it came along.

It is not within the scope of this presentation to dicuss the early treatment of compound jaw injuries. Suffice it to state that all wounds should be treated conservatively. Fractures must be immobilized and soft tissues sutured so as to convert the lesion into a closed wound. Grossly devitalized tissues should be debrided but with conservatism. Bone fragments should be left in place. All preserved structures will be of inestimable value to the plastic surgeon who will ultimately finish the reconstruction. Prompt prophylactic chemotherapy in adequate dosage is imperative. We have been impressed with the degree of primary healing, and the lack of sequestration and abscess formation that has resulted since the advent of penicillin and its combined use with sulfa drugs.

In this paper we wish to stress our general plan of procedure in the late management of maxillo-facial injuries. Such treatment will be taken up under the headings of

1. Soft tissue injuries
2. Bony injuries
3. Dental prosthetic replacements.

Soft Tissue Injuries. — In planning the construction of soft tissue losses about the mouth, one must provide for skin covering, including vermillion border, a mucous membrane or substitute lining, and intervening subcutaneous fat and muscle substance. In planning the repair, whether it is for the lips, or distant parts involving the cheeks, one should always attempt to use facial structures insofar as possible. These may be obtained by local interpolated flaps, Z-plasties, or by simple advancement of adjacent skin flaps. The use of tube pedicle flaps from distant areas is reserved for those cases wherein it is impossible to find sufficent tissue about the injury to provide adequate substance. The utilization of such distant pedicle flaps is always laborious and results in a transplanted skin covering that never matches the surrounding normal face skin. Consequently, this method is used only as a matter of necessity, and never of primary choice.[1]

Larger lip defects are repaired ideally by utilizing the Abbé-Estlander procedure (Figure 1, 1A, and 1B)[2]. Subtotal loss of either an upper or lower lip can be made from the opposite lip by this method. The cosmetic and functional result is excellent and no disturbance of the

From U. S. Naval Hospital, Oakland, California.
Presented at a meeting of the San Francisco Bay Area Naval Medical and Dental Officers at U. S. Naval Hospital, Oakland, California, September 21, 1945.
The opinions and views set forth in this article are those of the writers and are not to be considered as reflecting the policies of the Navy Department.



Figure 1



Figure 1A



Figure 1B

innervation to the orbicularis oris muscle is made like that which follows those operative procedures around the angles of the mouth.

Small defects with little loss of substance can be corrected by simple revision of adjacent tissues after first excising all the scar. Ideally, all intra-oral linings are furnished by readjustment of existing mucous membrane. In exceptional cases, usually where subcutaneous fat is needed, a pedicle skin flap is brought in from some distant hairless area. The majority of our intra-oral soft tissue problems however, have been the obliteration of either upper or lower buccal sulcus with scar tissue. These are associated commonly with compound fractures of either the mandible or maxilla and are usually complicated by the loss of teeth from the alveolus along the site of contracture.

These intra-oral scar tissue deformities may cause some limitation of opening of the mouth, but more important, the obliteration of the buccal sulcus will not permit the insertion of a properly fitted dental prosthesis to replace the missing teeth. The correction of this deformity consists in first deepening the sulcus by excision of the scarring. In order to prevent recurrence of the defect, one must then line the raw surface with an epithelial covering, either with mucosa, or since it is simpler, a thin split skin graft. Since it is difficult to retain the stent graft as customarily applied, we have evolved the following technique for its retention. Intra-oral dental casts are first prepared by the dental surgeon. From these, the dental prosthesis is constructed, carrying the missing teeth. When prepared, the buccal sulcus is deepened by excision of the scar and additional soft dental stent is applied to the prosthesis to fill the newly prepared sulcus to the point of slight overdistension. After the stent (dental modeling compound) hardens, the prosthesis is removed. The portion covered by the stent mold is then overlaid by a single thin split skin graft taken from the hairless portion of the upper arm (Figure 2). The dental pros-

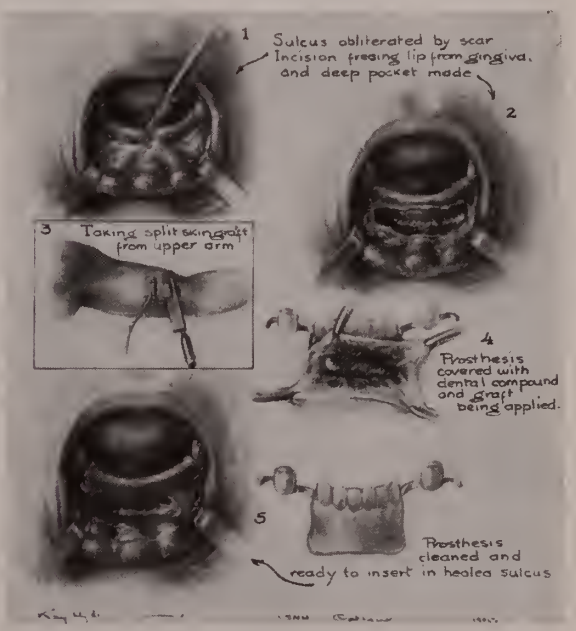


Figure 2

thesis, which is now covered with the skin graft with its raw surface outward, is then replaced into the mouth so that the skin graft lines the raw surface of the newly created buccal sulcus. When the prosthesis is slipped into place, no other fixation is necessary. It is left in place

for 5 to 7 days, following which it is removed for the first inspection of the graft and then reinserted. The denture is then changed daily for cleansing. The dental stent is left attached to the prosthesis for approximately one month. Finally, the dental modeling compound may be removed and the dental prosthesis worn as a permanent appliance.

In passing it should be pointed out that certain lip injuries and reconstructions may be complicated further by drooping of the lower lip or angle of the mouth. Such paralytic ectropion is produced by injury to all or a portion of the facial nerve. An acceptable correction may be obtained by support with one or more strips of autogenous fascia lata placed subcutaneously. The lower end is secured beneath the area of ectropion while the upper is fastened to the temporal fascia (Figure 3).

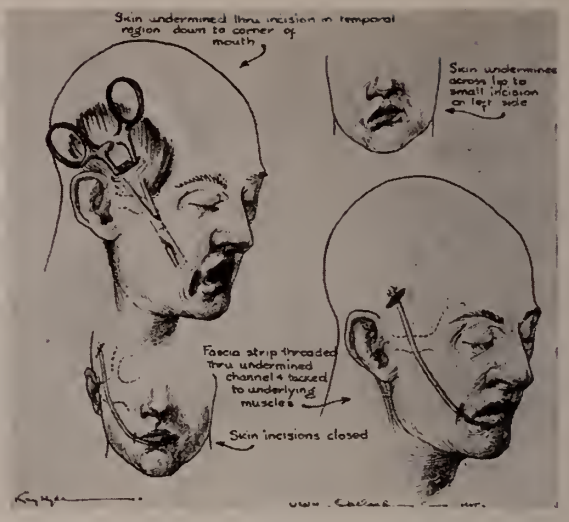


Figure 3

Bony Injuries. — Early accurate reduction of fractures of both the mandible and maxilla are imperative. Immobilization by interdental wiring will suffice in most cases. External pin fixation is rarely indicated except when dealing with a fracture of an edentulous mandible.[3] We feel that use of the complicated type of external fixation apparatus attached by means of a plaster of paris skull cap has little practical routine application.

Indications for open reduction are chiefly due to those of faulty or non-union and loss of bone substance. In carrying out an open reduction, one must be very careful not to enter the oral cavity while carrying out the dissection. However, we have been doing all bone surgery during the past year under pre- and post-operative penicillin and sulfadiazine prophylaxis. During this time, we have had no complicating infections.

If a mandible cannot be reduced accurately by customary means, external deformity of the jaw and mal-occlusion of the teeth will occur. This will necessitate late open reduction, which is never as satisfactory as early open correction. The corrected fragments can usually be immobilized by loops of stainless steel wire placed through the broken ends of bone, or by metal pin fixation through the body of the mandible.

If there is non-union of the fracture, the scar should be removed from the bone ends through an incision placed beneath the site of injury. An osteoperiosteal graft or bone chips taken from the iliac crest are then laid over the fracture line and the soft tissues closed.

Fractures of the coronoid and condyloid processes are frequently considered too lightly. One case was unable to open his jaw because of malunion between the left coronoid process and the left zygomatic arch following a compound comminuted fracture from a shrapnel wound.[2] Extension of the mandible occurred only after open reduction through the cheek scar and revision of the malunited fragments.

Adams[5] has pointed out the advisability of early accurate reduction of fractures of the condyloid process. While these fractures are often permitted to heal in the unreduced position, his cases in which open reduction and fixation of the fragments by wiring, gave rise to a much more stable and functionally perfect jaw. The wisdom of this attitude is demonstrated in one of our patients who was admitted with a healed fracture dislocation of the condyloid process. The chief complaint was that of pain in the ear when chewing, the type of temporomandibular joint syndrome described by Costen.[7] The distress was relieved after resection of the displaced fragment.

The most common indication for open reduction of any mandible is because of loss of bone substance. Prior to bone surgery however, one must have present or prepare the soft tissue bed into which the bone graft is to be placed. The dental associate of our team must construct

and apply a secure fixation apparatus to the remaining teeth. This must hold the bone fragments in their reduced position, so that the upper and lower teeth will articulate normally. When this is completed, one is then ready to open the mandible through a skin incision below its lower border. An ample opening is prepared in the soft tissues. The bone ends are freshened subperiosteally with an elevator, curett, riffler, or rongeur forceps.

For source of bone graft, we prefer to use the iliac crest. This material may be obtained easily, a large block can be secured if needed, and the post-operative discomfort following removal is negligible. The only hazard to consider, might be that of intraperitoneal damage during removal. This however should be obviated if ordinary skill is observed.

From the iliac crest, one may take an osteoperiosteal graft if needed. For large defects a block of bone, secured to the mandible ends with stainless steel wires, gives the best mechanical type of repair (Figure 4). For smaller defects, the iliac crest may be cut into small chips (Figure 5), which are placed loosely around the fracture and the soft tissues then sutured over. However, irrespective of the size or shape of the iliac bone graft, since it is a soft cancellous structure, it will vascularize readily following which rapid and certain bone union will occur.



Figures 4 and 5

When firm bony union is observed clinically, and it must be added that this is noted months before x-ray evidence appears, one may then remove the intra-oral dental immobilization splints. The dental prosthesis is now made and applied. Finally, when indicated, the buccal sulcus is deepened and lined with a stent graft.

Dental Prosthetic Replacements. — The dental prosthetic appliances found necessary in the rehabilitation of battle casualties may generally be classified in two groups:

1. Fixation appliances for fracture reduction and bone grafting.
2. Permanent dental appliances to replace missing structures and as an aid in plastic repairs.

FIXATION APPLIANCES

The immobilization of osseous parts is obtained by external fixation, internal fixation or a combination of the two.

It has been the experience of our staff that true external pin fixation is seldom a necessity. Its use is avoided because of the discomfort to the patient, because of the frequency of the failures observed and because of the comparative ease with which internal fixation appliances are worn. Generally speaking, our use of external pin appliances is limited to a few edentulous cases and where internal fixation cannot be applied.

For internal fixation two types of splints are used, acrylic or plastic, and metal. Acrylic splints, while easily constructed, are very limited in their use. There are many objections to them mechanically and they are definitely unclean. Metal splints have been our choice because of their positive action, cleanliness and extreme flexibility of design. Metal splints can be used for the immobilization of most any case in which an adequate number of teeth exist in all or even one of the fragments involved.

The immobilization of fractures in which teeth are present in both segments is a relatively simple procedure and in many of these cases inter-

arch wiring may be dispensed with completely.

Those problems presenting no teeth in the proximal fragment may be very simply immobilized by combining a sliding rod (Figure 9) into one of these splints. The splint is bolted to the teeth of the distal portion, the proximal stump manipulated into its correct position, the pointed metal rod inserted through its sleeve and on into the soft tissues and bone of the proximal portion. The rod is then locked with a set screw.

This same technique may be employed should one good, badly tilted or unerupted tooth remain in the proximal portion. The only variation is that the rod is shaped to fit securely into this tooth. In these cases we have found it advisable to secure a wire around this tooth and to create a forward tension upon it thereby eliminating any chance of the tooth drifting.

A similar technique may also be utilized for stablizing mandibular rami in conjunction with interdental wiring by utilizing a splint on the upper teeth and driving the pin downward and backward into the retromolar area of the ascending ramus. This approach is found quite feasible in the absence of sufficient lower teeth.

The immobilization of segments of the mandible prior to the insertion of bone grafts is a problem best solved by the metal splint. There is no limit to the designs that may be employed and their use in conjunction with interdental wiring, orthodontic appliances etc., are found quite helpful.

The construction of these splints requires an accurate impression of the teeth and their surrounding tissues with good models of both arches so that occlusal interference may be avoided. The models are then cut and reassembled to establish their true anatomical positions. They are then surveyed for undercuts, the splint waxed up directly on the lubricated model and in as few sections as the undercuts diciate. Locations are also developed for bolting these splint sections together. The wax patterns are then removed, cast in coin silver and polished holes are drilled, threaded and the units are cemented and bolted in place.

Metal splints are not a panacea for all fracture problems but we do believe that their use is indicated in the majority of difficult cases. Once properly applied, immobilization of the parts is assured, stress is distributed evenly on all the remaining teeth, the mouth can be kept clean and the patient comfortable. In many cases the patient may continue to eat and to talk normally while wearing the splint.

Permanent Dental Appliances. — The construction of permanent dental prosthetic applianes to aid in the rehabiltation of battle scarred mouths presents a challenge which has to be met with an open mind, a will to do, patience and skill. Many of the problems are far removed from the routine procedures to which the dental profession has been accustomed. Appearance, function and clearness of speech are all at stake. After plastic revision of the soft tissues and bony structures, three problems must be taken into consideration:

1. The reshaping of the tissues within the mouth.
2. The replacement of the missing teeth.
3. The restoring of other lost intra-oral parts.

The reshaping of the buccal sulcus within the mouth by releasing the scar contractures and covering these areas with a stent graft has previously been covered in this paper (Figure 2). The basic purpose of the operation is to provide a better foundation upon which to fit our dentures.

The replacing of the missing teeth is by far the most difficult phase of our work because of the freakish mechanical problems created by high velocity missles. Usually all of the anterior teeth are missing with much of their bony support. Few good posterior teeth remain. The problem of leverages is severe and invariably calls for stress-breaking appliances.

A common problem is the loss of all the teeth on one side of the jaw with a continuous row intact on the other. These unilateral cases present close bites and considerable bone loss.

Another complication frequently encountered is that teeth have to be replaced before plastic revisions about the external mouth can be finished. This is done so that the plastic surgeon may judge more accurately the true facial contours as they will finally exist. Because of limitation of mouth opening, full sized trays cannot be used, and this calls for sectional impressions and assembled models. This adds to the time consumed and the error hazard.

The replacement of other missing intra-oral parts includes the restoration of portions of the palate and the closing off of sinus defects and post-operative cystic cavities. This is usually

done with obturators. These may be attached directly or indirectly to the dentures.

In conclusion, the technique of handling these problems which has been evolved by our dental and plastic departments, while painstaking and time consuming, lends itself to the speedy fulfillment of all three of the above demands. The supplying of the stent mold for the intra-oral skin grafting, the replacement of the missing teeth and the restoration of other lost intra-oral parts are all frequently consummated in one operation.

BIBLIOGRAPHY

1. Smith, Ferris, J.A.M.A., 120, 5, 352, 1942.
2. Greeley, P.W., Transactions of Amer. Assoc. Plastic and Reconstruct. Surgery, 1944.
3. Greeley, P. W., Throndson, A. H., J.A.M.A., 124, Apr. 15, 1944.
4. Greeley, P. W., Surgery, Vol. 15, No. 2, Feb. 1944.
5. Adams, W. M., Transactions Amer. Assoc. Plastic and Reconstruct. Surgery, 1944.
6. Greeley, Gurdin, and Pound, Calif. and Western J. Med. & Surg., In press.
7. Costen, J. B., J. Mo. Med. Assoc., 32: 184, 1935.

THE USE OF PRESERVED BLOOD PLASMA IN CIVILIAN PRACTICE

by
EMMET F. PEARSON, M.D.
SPRINGFIELD

The outstanding success obtained in war surgery by use of dried, pooled human blood plasma in combating shock and in the treatment of burns made obvious the desirability of having an adequate supply of plasma available for use in civilian institutions. Certain disasters such as the Cocoanut Grove and the "Big Tent" fires have emphasized the necessity for civilian institutions to maintain a plan of preparedness similar to that of military installations to provide for a large number of casualties and an adequate supply of plasma should be a part of that plan. The war reserve of dried plasma collected from volunteer donors and processed by the American Red Cross is now being distributed to institutions and physicians in Illinois through the Illinois State Department of Public Health. The present plan of distribution covers a two-year period and a program for future collection, processing (fractionation) and distribution of blood products is said to be under advisement. This is a great opportunity for a cooperative service between the American Red Cross, the State Departments of Health, and civilian institutions, and it is another example for the public of the utilization of our means to safeguard their health.

The purpose in the administration of blood plasma is the rapid replacement of lost blood proteins. The loss of proteins from the circulation may be acute as in shock, or it may take place more slowly in a wide variety of surgical and medical conditions. Plasma will find its greatest usefulness in replacing acute losses as in certain types of shock and burns, but much has been learned about depletion of plasma and body proteins in other less acute conditions in which plasma administration may be very beneficial. As plasma now is readily available, the fields of its usefulness should be defined and its relative value in overcoming plasma protein depletion (hypoproteinemia) as compared with whole blood, amino acid preparations, or high protein diet should be reconsidered.

Depletion of, or deficiency in, the plasma proteins may result from any one of the following disturbances in physiology or clinical syndromes:

1. Excessive loss of protein.
   a. Acute.
      1. Hemorrhage.
      2. Surgical shock.
      3. Burns.
      4. Shock syndrome in virulent infectious diseases (meningitis, pneumonia, etc.).
      5. Peritonitis and intestinal obstruction.
      6. Crises in Addison's disease.
      7. Following operations.
   b. Chronic.
      8. Nephrosis.
      9. Ascites.
      10. Exfoliative dermatitis or weeping eczema.
      11. Widespread or excessive suppuration.
      12. Severe or chronic diarrhea (cholera, dysentery, ulcerative colitis).
2. Deficient intake of proteins.
   a. Starvation due to famine or imprisonment.
   b. Faulty food habits, food fads, etc. (Vegetarians).
   c. Anorexia nervosa, alcoholism, etc.
   d. Obstructive disease of the gastrointestinal tract.
   e. Comatose states. (Diabetic coma).

3. Failure of absorption of proteins from intestine.
   a. Chronic diarrhea.
   b. Sprue.
   c. Steatorrhea.
   d. Idiopathic hypoproteinemia?
4. Failure of synthesis of blood albumin by the liver.
   a. Hepatitis.
   b. Cirrhosis.
   c. Idiopathic hypoproteinemia?
5. Excessive destruction of proteins.
   a. Acute infectious diseases.
   b. Toxic states.
   c. Burns.
   d. Anesthesia.
   e. Thyrotoxicosis.
   f. Severe trauma (alarm reaction).

When there are profound changes in the circulation as in shock, hemorrhage, and dehydration, quantitative determination of plasma proteins is misleading due to concentration and decrease in blood volume. When none of these conditions exist, or have been corrected, the laboratory methods for determining blood protein level are reliable with no greater margin of error than in many other procedures. The choice of method is dependent somewhat on the experience of the technician and equipment available. The specific gravity of blood plasma is usually in direct ratio to the protein content, (unless there is lipemia); therefore the specific gravity as determined by the falling drop or the copper sulfate method may be directly translated into protein values. A colorimetric method (biuret) using a "phenol reagent" and the photoelectric colorimeter is a satisfactory method for hospital or office use. The microkjedahl determination of nitrogen content is the most reliable method and is used when research accuracy is necessary. Fractionation, that is determination of the albumin and globulin fractions, should be a routine procedure when disturbance of blood proteins is suspected.

The normal total protein is 6.5 to 8.0 grams per hundred cubic centimeters; the albumin fraction 4.0 to 5.5 grams and globulin 1.5 to 3 grams. Fibrinogen is only 0.2 grams per 100 cc. and is of no importance except in the process of blood clotting. The globulin fraction is synthesized in the reticuloendothelial system and is a complex group of substances, a part of which are immune globulins. The globulin fraction is not very important in maintaining the osmotic equilibrium of plasma or in general protein metabolism. The albumin fraction accounts for about 85% of the colloidal osmotic pressure of the blood and deficiency of this fraction accounts for the clinical manifestations of hypoproteinemia. Blood albumin is synthesized in the liver and is not only important in maintaining osmotic equilibrium but also supplies protein needs to the tissues. The globulin fraction may become increased in convalescence from certain infectious diseases, and may mask an hypoalbuminemia if only the total protein level were determined. When the total blood proteins fall below 5 grams percent or the albumin below 3 grams percent, edema may develop due to lowered osmotic pressure in the blood stream. However, there is a great lag in this correlation so that it is misleading to speak of a "critical" level below which edema will follow. A complete picture of the state of the blood really requires a determination of the blood volume, a hematocrit determination, red cell count as well as the albumin and globulin determination. If one remains cognizant of the possibilities for error when the blood is concentrated, accurate clinical appraisal of the patient and the plasma albumin level are usually sufficient to judge the protein requirements in a particular case.

The body does not have a reserve supply of protein comparable to the reserves of fat and deficient intake or excessive loss of protein promptly causes disturbance in physiologic processes. There is no clinical laboratory method of determining early protein deficiency. The history and nature of the illness may give suggestive information. It has been estimated that quantitative changes in the total amount of circulating plasma albumin represents but one-thirtieth of the change in the protein in the entire body fluid; for example, a drop of plasma albumin from 4 to 3 grams per 100 cc. in an individual with a blood volume of 3500 cc. and about 1700 cc. of plasma means the loss of 17 grams of albumin from the circulation, but this theoretically represents a loss of 30 times 17 or about 500 grams from the rest of the body. To completely replace this apparent deficit of 500 grams by parenteral plasma, about 30 units of blood plasma containing 17 grams protein

each would be required. Complete replacement is not the aim in the therapy with plasma. A suffieient quantity is given to tide over an emergency or to improve the general physiologie processes so that the body can synthesize its own protein from an adequate protein intake in the diet. In shock the proteins are not lost from the whole body but are temporarily lost from the blood alone.

It is obvious if the blood plasma protein level is below normal that therapy should be directed toward correcting this defect. The most satisfactory method of replenishing body proteins lost through any route in an otherwise healthy individual is by high protein intake in the diet. If for any reason the individual is unable to maintain satisfactory protein intake in the diet, several alternatives are available. He may be given tube feedings with a liquid diet of high protein content or hydrolysates of protein. When it is not feasible to give feedings by mouth or by stomach tube, intravenous administration of protein hydrolysates (amino acids) is very satisfactory and an adequate protein intake can be maintained in this manner for a long period if necessary. Amino acids must be synthesized in the liver to form plasma albumin. Therefore replenishing proteins in this manner cannot be done quickly. When there is an acute loss of plasma proteins, which has become so severe that there is marked derangement of body physiology, or if there is severe liver damage, the method of choice is to give adequate blood plasma to raise the protein content and restore normal physiology of the circulation. Plasma may be used as a blood substitute in the treatment of hemorrhage as a temporary measure, but whole blood is more satisfactory if it is available. Obviously whole blood or red blood cells resuspended in saline is preferable to plasma when severe anemia exists from any cause. Whole blood is the treatment of choice to overcome the anemia produced by an infectious disease. Pooled blood plasma is not a good source of immune bodies but concentrated immune globulins against various diseases is a hope for the future. Blood plasma should not be used as the sole treatment for hypoproteinemia when simpler methods such as high protein diet or intravenous protein hydrolysates can be used.

When it became apparent that this country might become involved in a war, a blood substitute sub-committee of the National Research Council was appointed to advise the Surgeon Generals of the Army, Navy and Public Health Services. Although many blood substitutes had been tried, the committee originally advised only the use of dried human plasma as a battlefield substitute because it could be preserved for long periods of time and could be readily reconstituted and administered without previous typing. The Red Cross promptly set up blood collecting and processing stations throughout the country, and fortunately, a supply of plasma was available at Pearl Harbor when the "blitz" came there, and plasma was supplied in adequate quantity to our medical installations throughout the world during the entire war. The value of plasma in war surgery was proved in action, but there are certain recent investigators who tend to belittle its effectiveness. The success of plasma in overcoming shock and in the treatment of burns led the search for more satisfactory and less bulky battlefield substitutes. Professor E. J. Cohn of Harvard, of the Blood Substitute Sub-committee, separated the pure albumin fraction of the plasma and found that this protein was as effective as whole plasma in the treatment of shock and burns. Although the albumin fraction constitutes only about 60% of the total plasma proteins, it exerts about 85% of the osmotic effect of the plasma. One gram of plasma albumin will hold 18 cc. of water in the circulation. A standard Army and Navy package, a 25 gram vial of albumin, was prepared and had a limited distribution during the war. This small quantity of albumin has an osmotic equivalent of one unit of plasma or 500 cc. of whole blood. The albumin fraction apparently has all the desirable qualities of the whole plasma and is very stable. In the future plasma albumin may find a wide usefulness but at the present is produced in limited quantity. A special salt poor albumin has been prepared by Professor Cohn and has been found to be a powerful diuretic in certain diseases with edema, especially nephrosis, where it is necessary to keep the salt intake low. In the course of his studies on the plasma protein fractions, Professor Cohn and associates were able to separate five distinct fractions of plasma and made these available to clinicians to determine their possible usefulness. Gamma globulin which is effective in attenuation

of measles and other virus diseases and fibrinogen as prepared in the fibrin-thrombin combination for use as fibrin foam, fibrin film and skin glue are examples of the byproducts of blood fractionation. When whole plasma is administered for the albumin effect these nonalbumin fractions are also given but not in quantities to be physiologically very effective. However, they do no harm and until the process of blood fractionation and purification of blood albumin is further developed, dried whole plasma will be the material of choice for widespread distribution.

The specific indications for the administration of reconstituted dried plasma are:

1. Shock: It is necessary to supply exogenous plasma protein to restore blood volume with a colloidal solution which will hold water and electrolytes in the circulation. Although there may be adequate protein in the body tissues it does not reenter the circulation rapidly enough to correct the loss and thus to prevent circulation collapse. The quantity given in shock depends upon the severity of the shock and the clinical response observed. In severe shock it is usually necessary to give 1000 cc. or four units of plasma as an initial dose. There is no rule by which one can judge at the onset of treatment what the optimum quantity for the case may be, or over how long a time it must be repeated. It is considered more safe to err on the side of giving too much rather than too little. The patient's pulse rate, blood pressure, respiration, pallor or cyanosis, sensorium, diuresis, etc., are the guides to further administration of plasma. Laboratory determination (hematocrit and specific gravity of the plasma) of the degree of blood concentration may be a further guide to therapy. The use of plasma is only one phase in the treatment of shock and should not be used to the exclusion of other proven measures. One of the most important principles in consideration of shock is its prevention. Shock should be considered after any sever injury and plasma should be given prophylactically when clinical judgment indicates that shock may ensue. In severe shock the plasma may have to be given with positive pressure (syringe) in order to get the fluid into the circulation fast enough.

2. Burns: The quantity of plasma required to replace the protein lost through burn blisters obviously depends upon the extent of the burns, and the degree of shock associated therewith. In burns there is also some liver damage, and a great loss of protein through the urinary tract. One thousand cubic centimeters of plasma per 10% of the body surface burned has been used as a guide to the quantity of plasma to begin with. The clinician or surgeon *must observe his patient at frequent intervals* to judge how frequently plasma should be repeated. At times it has been found necessary to instill as much as 3500 cc. of plasma in twenty-four hours, or a quantity equal to the total blood volume. It may be necessary also to give whole blood transfusions in extensive burns when, as, and if one sees anemia which is caused by destruction of blood cells or deficient production in the bone marrow.

3. Nutritional edema: In severe hypoproteinemia with extensive nutritional edema, the total blood protein level may be found to be as low as 3 to 4 grams percent. It may be possible to overcome the condition with high protein diet or intravenous protein hydrolysates (amino acids) if the patient's general condition permits proper absorption of the proteins or synthesis of body proteins by the liver, but supplementary plasma administration may be very beneficial and even lifesaving in some cases. The author established a routine of giving 2 units of plasma daily until edema subsided to severely hypoproteinemic liberated prisoners at Santo Tomas University, Manila, last year and found that they soon were able to take adequate food to complete the process of recovery. Many of these ex-internees suffered from chronic diarrhea which prevented adequate absorption from the gastrointestinal tract, and it was necessary to continue plasma until the diarrhea was controlled. Amino acid preparations were not available for parenteral use in Manila at that time. It would have been desirable to have combined plasma and amino acids. It was found that some patients who had been hypoproteinemic for a long time developed irreversible degenerative processes and continued to lose ground while plasma was given daily, and died. In many others the use of plasma promptly increased the plasma protein levels, producing dramatic subsidance of edema and prompt recovery of the individual. Janet Vaughn, a British civilian physician, took both plasma and protein hydrolysates to the

infamous Belsen prison in Germany, after its capture, and found that both were very useful in extreme cases of hypoproteinemia.

4. Nephrosis: In nephrosis a large quantity of albumin is lost daily through the kidneys and generalized edema develops. The author has used plasma in the treatment of nephrosis and has found an increase in the plasma protein level and in some instances a disappearance of the edema. The salt content of the injected plasma is a liability when there is kidney damage. Plasma albumin with low salt content as prepared by Professor Cohn is said to be more satisfactory and eventually will be available as a "specific" in nephrosis.

5. Liver Disease: The author observed 1300 cases of hepatitis with jaundice in one army hospital. About 5% developed severe necrosis of the liver and the blood protein level dropped rapidly. One or two units of plasma daily, at the peak of the disease was thought to be a life saving measure in a few cases. In ascites, due to cirrhosis of the liver, a low level of plasma protein is caused in large part by loss of large quantities of albumin in the ascitic fluid. There is probably also a deficiency in the ability of the liver to synthesize proteins. Effort should be made to cause the individual to keep up a high protein intake by mouth. The administration of plasma in these cases should be a "booster" rather than a regular treatment. Intravenous amino acid preparations may be equally effective in increasing the blood albumin if the food protein intake is inadequate. Salt poor blood albumin is said to be of great value in ascites.

6. Miscellaneous hypoproteinemia: Hypoalbuminemia may be a frequent finding in the chronic illnesses listed earlier in this paper, if it is looked for and if proper laboratory tests are made. This applies to all patients who have ingested insufficient protein. Disturbances in circulation and nutrition of tissues occur long before the process progresses to the state of edema. The critical level of the blood proteins at which edema developes is not constant as Starling originally postulated. Edema may be expected when the total plasma level is below 5 grams per 100 cc., but the factors of venous pressure, electrolytes (salt) in the tissue juices, activity or muscle action influence the onset of edema. Hypoproteinemia from any cause renders the individual a poor operative risk because it predisposes to post-operative shock. Preoperative administration of plasma in sufficient quantity to build up the plasma protein level of a hypoproteinemic patient to near normal is a necessary prophylactic against shock if the same result can not be obtained by high protein diet or intravenous protein hydrolysates. Post-operative suppression of urine is sometimes due to hypoproteinemia, the blood osmotic pressure being insufficient to carry on the proper exchange of fluids from the tissues to the kidneys. Post-operative abdominal distension may likewise be due to hypoalbuminemia. The viscera may become edematous and the distension may allow further seepage of tissue fluid into the lumen of the intestines and peritoneum. A vicious cycle is set up which may be broken by raising the osmotic pressure of circulating plasma by adding exogenous plasma. Slow recovery and delay healing of wounds in tuberculosis, diabetes, gastrointestinal diseases, etc., may be in part due to hypoproteinemia. Bed sores usually occur in hypoproteinemic patients. If low proteins are found in a chronic condition, plasma may be indicated only as a "booster" treatment, high protein diet or parenteral protein hydrolysates are more indicated.

Conclusions:

1. Adequate supply of plasma should be available in civilian hospitals and emergency rooms to provide for a large number of casualties, in case of accidents. The free distribution of the Army-Navy surplus of plasma will enable civilian institutions to maintain the same degree of preparedness that characterized military installations.

2. There are many medical and surgical conditions in which acute hypoproteinemia may seriously interfere with physiologic processes and plasma administration given timely may be very beneficial.

3. Reconstituted dried plasma should not be used as the sole method to overcome simple hypoproteinemia but may with advantage be used to supplement a high protein diet or intravenous injections of an adequate protein hydrolysate.

4. Plasma should not be used as a substitute for whole blood in patients with a deficiency

of red cells from hemorrhage or other causes unless whole blood is not available.

The bibliography of this subject is tremendous and will not be published herewith but the author wishes to express his appreciation to Dr. Robert Elman, of St. Louis, and Dr. J. J. Sievers, of the Illinois Department of Public Health, for their suggestions and assistance in the preparation of this article.

INTRA-MURAL GROUP PSYCHOLOTHERAPY

J. W. Klapman, M.D.
CHICAGO

Changing concepts of psychiatric treatment, and especially the problems created by large masses of psychiatric casualties in the armed forces, place a new emphasis on mass therapy. As a consequence, group psychotherapy is fast emerging into general usage.

While the psychodynamics of group emotions is not understood in its entirety a few of its principles can be fairly well-delineated.

SOME MAJOR PSYCHODYNAMICS OF GROUP PSYCHOTHERAPY

Group Emotion and Formation.—According to Freud[1] in his treatise on "Mass Psychology and Analysis of the Ego" transference by members of the group unto their leader arises from the same source as the corresponding relationship which existed with the primal father. In his formulation, by reason of the fact that the entire group identifies with their leader in their egos they have also identified with each other, and for that reason are constituted a group. Redl[2], however, points out that while in general this formulation may describe some groups it does not explain many other group formations. There may be groups not at all based on the leadership principle, and the basis of group formations may be so varied that no single formula can encompass all of them. Thus, for example, in his studies on the behavior of children's groups he finds emotion and group formation to crystallize about a tyrannical and punishingly disciplinarian teacher who is not at all admired, but rather feared. Group emotion may even form about a "bad influence," a member who may not only not serve as the leader in the usual sense, but one who is even looked down upon by the other children. Therefore he calls the individual about whom group emotion originates, "the central person" and not necessarily the leader. In his article on "Group Emotion and Leadership" he has described ten types of group formations nine of which do not correspond with Freud's leadership group. These types do not exhaust the possible group formations, but are given merely as samples: It is also to be said that there is no fundamental conflict between Freud and Redl; the latter has merely enlarged and amplified the scope and range of group emotional formations.

While Redl delineates clear-cut group formations as one may say, in "pure culture," in the actual practice of group psychotherapy one finds formations corresponding to a mixture of the first three of Redl's ten sample types predominant with an occasional temporary intrusion of elements of other types.

In group psychotherapy, it would appear to the writer, the therapist serves in some measure in the capacity of Redl's 1) "Patriachal Sovereign" type, 2) "The Leader" type, and 3) "The Tyrant."

He acts in the capacity of the first and second types largely because the therapist appeals in some measure to the narcissistic as well as the love emotions of his patients. The patients will exhibit tendencies indicating that they place the therapist in place of their ego-ideal; they become a group, also, because they incorporate to some extent the therapist's personality into their ego-ideal.

On the other hand the therapist is forced to play a dual role. Although sympathizing with the drives of his patients he must represent the point of view of the institution which he serves and that of extra-mural society in general. To the extent that he can combine these functions harmoniously he creates an atmosphere of security and satisfaction for his charges. Nevertheless the role of representative of the institution he serves forces upon him the function of mild disciplinarian, and unavoidably introduces the element of fear, the element which makes for the group emotion analagous to the one found in Redl's type 3), "The Tyrant." In the more "pure culture" of the tyrant type of group forma-

---

Read by title before the Physicians' Association, Department of Public Welfare, State of Illinois, 104th Annual Meeting, Illinois State Medical Society, Chicago, May 16, 1944.

tion, children identify with their tyrant-teacher out of fear of the aggressor. However attentuated, this may also occur in group therapy because of therapist's obligation to enact and enforce certain regulations.

Incorporation of Therapist's Personality into Patients' Ego-Ideal.—Under ordinary conditions of group psychotherapy the class of patients becomes a group because they incorporate to a considerable extent the personality of the therapist into their ego-ideal. On the basis of this similarity they develop transferences toward therapist and toward each other. Because of this there is an acceptance, more or less, of interpretations which one could hardly conceive of on the basis of the transitory individual relationships as they usually occur in the usual ward practices of a large mental institution. Under these conditions a patient who feels negatively regarded by the therapist will not feel frightened, but unhappy. A case in point from the writer's class occurred some time ago. H. P. ventures a strong protest against the material used in the class textbook. She explaims: "How can I understand those big words? Maybe if it was written in simple words I could get it!" Almost immediately a number of other patients come to the defense of the therapist and point out the usefulness of the big words and how impossible it is to avoid some of the pollysyllabic words. They appear anxious to vindicate therapist. H. P. herself, after this outburst, begins to apologize. She requires much reassurance from therapist that the criticism is well taken. Parenthetically, it is noticeable, too, that this patient thereafter becomes more attentive to the subject-matter dealt with in class, and makes a greater effort to understand it and with considerable success.

The danger to this group formation is not the patient who misbehaves but rather the patient who attempts to get a more intensive transference from therapist. In class there are often included a number of more or less autistic, withdrawn patients who may suddenly break out in peals of apparently unmotivated laughter. Except that one or two such patients may hinder the progress of the classwork momentarily there is no great danger from that source. Most patients are sympathetic toward these individuals. It is rather the narcissistic individual who constitutes something of a menace to the equilibrium of the group. Such a one is H. M. She is a good-looking woman approaching middle-age, classified manic-depressive psychosis, manic type. When younger she had once won some beauty contest; rather charming personally and quite a dabbler in the arts and other cultural pursuits. In class she constantly monopolizes the spotlight. Invariably she argues taking the opposite views on any and all subjects; quotes various sources. At one time she obtained permission to read a bit of newspaper doggerel to the class ridiculing the psychiatrist. Thus she creates some smoldering hostility against her in other patients. E. M., herself of an hysterical make-up, is observed sulking in the back of the classroom and when interrogated exclaims vehemently: "It's that H. M. I hate her!"

Group Emotional Formation Through the Infectiousness of the Unconflicted Personality Constellation over the Conflicted One.—As stated, in the class there are frequently included patients who apparently are in so acute a psychotic state that there would appear to be little to be gained in their inclusion. But precisely this must be counted as one of the important gains of group psychotherapy. The problem of patient distance, that is how conflicted may the patient be and still be included in the class without too great a disturbance to group emotion, remains to be determined. Disturbed and more or less acutely psychotic patients brought into class will often become immersed in the class atmosphere and after several class attendances may become part of the group formation with resulting mental improvement. The example of the therapist and that of the relatively unconflicted patients exercises a therapeutic effect and helps to bring the new arrival into the current of the group formation. Something of this mechanism has been noted in animal experimentation, as for example, in Masserman's[3] experiments with cats wherein the conflicted cat is gradually induced to make tentative attempts to take food through the example of the unconflicted cat eating normally from the food box. This was especially exemplified by V. N., a paranoid patient. Group therapy was held on the ward where in the mornings V. N. and other patients received insulin hypoglycemic treatment. He would lie fully clothed in his bed, about 25 feet from where the group was assembled, holding recitations and discussions.

Loudly swearing and showering threats and vituperations on therapist and various patients in the class, he attempts to disrupt the proceedings. After several weeks of this he would still pick up a statement made in class and guffaw over it. Gradually, from his distance he begins to make (still truculent) queries which no one answers, and occasionally attempts to answer a question addressed to someone in the class. Finally after a number of weeks he takes his place in the class, takes part in the classwork in a cooperative and friendly manner. Before he had gone home he had become a cooperative, reasonable and agreeable individual, taking a very intelligent interest in the classwork. We do not know whether he was "cured," but at the time of his release he was enjoying at least an excellent remission.

Intellectualization.—There can hardly be a doubt that patients are afforded a measure of emotional catharsis in the class sessions. The self-expression thus permitted patients leads to an objectification of the patients' problems from which he begins to see them in a new perspective. Comments by other patients and therapist increase this insight. The role of the intellect in therapy should not be minimized. With regard to insight Alexander[4] has stated: ". . . . Insight becomes deeper, more and more comprehensive, slowly enforcing its verdict, until the emotional patterns yield and its components are gradually forced into new, more satisfactory combinations. This process has no sharply limited termination . . . on the other hand, after an insight has deeply penetrated the patient cannot get rid of it any more — its voice is soft, its effect slow, but permanent."

One cannot deal long with patients without realizing to what extent theirs and that of average persons' lives and minds are influenced by certain patterns of thought — social images as they are called by Trigant Burrow[5]. That they act often to becloud insights can hardly be doubted.

Hans Syz[6] remarks on the role of social images: "There is here as Dr. Burrow has found, to live up to an image of self, a state of constant transference to the exactions of the self-image as it is projected on the persons and institutions that compose the surroundings. The direct relation to immediate realities is lost, and is replaced by an habitual mood dependence upon reflected images. This arbitrary superstructure occasions anomalous tensions and artificial drives and these abstract and contradict natural and unsophisticated action."

Amongst patients the reflected exactions of social images are observations which can be constantly made in class. For example J. B. about 45 years of age, classified Dementia praecox, paranoid type. In class whenever the role of the mother figure is brought in for discussion as determining psychopathology he finds considerable difficulty in understanding this point of view. He staunchly defends the whole sentimental constellations of ideas surrounding the subject. Later on when the subject of ambivalence is discussed and illustrated with a case history he appears very interested and agrees that there is much in what has been said.

Still later, in personal interviews after he has left the hospital he reveals how his mother had always dominated him. He alludes to the fact that he had become involved in a murder charge through her. The anamnesis corroborates this revelation and states that patient had driven his mother to the scene where she had shot and killed the woman to whom her husband was paying attention.

Most of his life he had been under his mother's domination, but not entirely willingly. His mother even then was making inordinate demands on him. With considerable feeling he recounted the impositions and strictures his mother had placed on his own domestic menage. At the time of his hospitalization he had been living with his mother, apart from his wife and young son. Now he was throwing off the maternal yoke; it was time he pay more attention to the claims of his wife and son. This resolution the patient has kept in the main, quite to his own satisfaction.

Patient-to-Patient Transferences.—We have already seen that because of group emotion there is a transference to the therapist, and because of this also a patient-to-patient transference as well. The latter manifestation has even a far wider significance than its application to the confines of the classroom; for the patient-to-patient transferences tend to carry over into the post-hospitalization period. This accounts for the several ex-patients organizations now functioning in several parts of the country. The patients' organization

per se is a therapeutic agent, and it is no mere accident that such an organization as Alcoholics Anonymous has assumed national proportions. The patients' organization helps to provide a transitional medium in which the patient may be shielded from the shock of sudden immersion into extra-mural society. More than this, the organization of ex-patients provides ego-support. With the help of such an association many patients may remain useful members of society for indefinite periods. Federn[7] has commented on the fact that the patient should always have a person in the post-hospitalization period to whom he may relate himself in a positive transference relationship, a kind of helper to the therapist, and without such an assistant the improvement in the patient is bound to be in most instances of an ephemeral character. The treatment of mental disorders is not entirely free of those categorical attitudes by which a therapeutic agent or method is judged exclusively by the number of "cures" to its credit. Later it may be discovered that the therapeutic agent in question is an effective accessory and not an absolute cure, and one then appraises its value in terms of indications for its use. Likewise with the severer forms of mental disorder. It must be recognized that there is a point in such disorders beyond which the pathology is no longer reversible, and their parallelism with, let us say, cardiac valvular disorders must be carefully considered. The objective of the cardiologist in such instances is not "cure," but keeping the patient compensated and as comfortable as possible. This is considered a worthwhile achievement, although, patently, the patient will continue to need medical attention and supervision for the rest of his life. Why this should not be equally true of the psychotic and why it should be expected that the psychotic shall be thrown back into extra-mural society in the post-hospitalization period without any further supervision is a little bit of a mystery. The organizations of ex-patients of which we shall see and hear more in the future do much to supply the patient with the needed ego-support.

Catharsis.—It will be no misrepresentation to state that under the usual regimen of the large mental hospital one of the basic therapeutic dynamisms receives very little expression. We refer to the matter of therapeutic catharsis. In a large mental institution most of the work is of a routine character. A number of institutions, especially of the private and smaller types have been able to remedy this condition by frequent private psychotherapeutic interviews, but for the large state hospital hardly a better means can be found than the group psychotherapy session. The group therapy is conservative of the doctor's time and the hospital's convenience. In the therapeutic atmosphere thus created, in the presence of a more prmissive and understanding climate, something remarked on in class will often be associated to, letting loose a cathartic stream. For example, discussing the paucity of provision made by the public for mental health and certain related deficiencies and difficulties, F. F., a woman of about 36, classified dementia praecox, hebephrenic type, recalls now how during the first world war she had attended a German catholic school. Her school work was of a very high grade and she had always received much commendation and marks of distinction from the nuns. When the use of the German language was frowned upon the nun had made some assertion that the use of German in that school was to continue unabated. Our patient had asserted that she did not agree with this point of view. The teacher had become quite wrought up over this bit of rebellion and had evinced considerable displeasure toward her. Our patient relates all this with much feeling, speaking with great rapidity; she relates what a great emotional upset she had thus experienced and mentions she has never spoken of this episode to anybody before this.

An exhaustive discussion of all reasonably well-known group psychodynamics is naturally impossible; the highlights have been touched upon. We must proceed to the subject of administration of group psychotherapy.

METHODS OF ADMINISTRATION

There is at the present time a great diversity of administrative techniques. Wherever effective, the therapeutic results stem to a considerable extent from the dynamics of group formation and group emotion. As yet no comparative data exists between the several methods. Indeed so many variable factors are encountered here that a systematic evaluation of the relative merits of the different techniques seems well-nigh impossible at this time. Up to the present it seems possible to distinguish 2 types of techniques, viz:

(a) Psychodrama (b) Reeducation

(a) Psychodrama

Its originator, Dr. J. L. Moreno[8] thinking of therapy in terms of dramatic technique, divides the treatment into two phases, to wit, psychodrama on the spot and psychodrama in the theatre.

Psychodrama on the spot is a relatively less specific form of therapy, consisting of all contacts, associations and everything that transpires between the patient and the personnel of the institution.

Psychodrama on the stage is begun when the patient has been motivated adequately to desire to act out some aspect of his conflict and personality, assisted by "auxiliary egos" — personnel of the institution. The psychodrama is acted out spontaneously in a specially constructed theatre with three platforms or stages arranged concentrically. Moreno refers to it as the spontaneity theatre. During the course of the psychodrama the patient-spectators as well as the actors, are apt to warm up and take part in the action, and thus the whole group will participate in the therapy, either on the stage or as spectators.

Solomon has attempted a modification of the practice of psychodrama in that after the psychodynamics of a given case have been studied and understood a dramatic script is written and acted out.

(b) Reeducational Therapy

Group psychotherapy may range in intensity and acuity of focus from the creation of a diffuse group therapeutic atmosphere or climate to the treatment of specific psychodynamic problems of given patients. L. C. Marsh[9] claimed for group therapy only the function of stimulating and inspiring patients to a happier state of mind in the same manner that a religious revival meeting revivifies religious feeling. He stated in 1930 his belief that it did not matter greatly what the subject of the discussion or lecture is as long as it had the tendency to extrovert the patients. Thus he reports his surprise that a lecture on Russia or a lecture on "How to Raise a Baby" were more effective than a discourse on some psychological subject. But it must be remembered that these deductions were made from groups numbering up to as many as 500 patients. For it is not difficult to determine that the common denominator of emotional and intellectual response must be lower in a group of 200 than in a more or less selected group of 20.

But group psychotherapy can be focussed down in area and increased in intensity to a relative pin-point. Schilder[10] practiced group therapy with groups consisting of 6 to 8 patients. The history of each patient was closely studied before admission to class and the essential psychodynamics in each case was well understood beforehand. Usually the patients wrote exhaustive autobiographies and the therapy was conducted intensively on the basis of psychoanalytic principles. Wender[11] essentially followed the same methods. From the group therapy as described by Marsh in his early experiments to the group psychotherapy practiced by Schilder there is therefore a considerable range of intensity.

There are at the disposal of the group therapist a number of vehicles in the administration of reeducational treatment.

(1) Series of Lectures

A system of lectures is probably the readiest means which comes to mind in the administration of group therapy. When, in 1918-1919, Lazell[12] began a series of lectures to groups of patients he reported his results in the following terms: "Silent, dreamy boys suddenly became interested and drank in every word, realizing that here was someone who understood their troubles."

Such lectures can usually be begun with discussions of the reasons for admissions to hospitals and of the relationship of society to the mental patients.

This subject is an extremely tender spot with practically all patients. Unopposed, the patient will rationalize an elaborate system of delusions concerning his commitment, but a series of objective dispassionate explanations revivifies for him the objective world and recalls to him the objective criteria by which he, too, in his premorbid state, guided his existence. These lectures can be depended upon to evoke considerable comment, discussion and catharsis.

The series of lectures may start with a discussion of mental illness and what is comprehended in the term. The lectures may proceed to trace personality development and the way in which psychic dynamisms are employed by the patients. The therapist will find that when these subjects are skillfully presented in as simple language as

possible that many patients will exhibit a mental grasp of these psychological desiderata which will be a constant source of wonderment to him.

(2) History Reading

A device which seems quite unorthodox and which has been practiced by Schilder is that of reading the history of one of the patients in the class. Preferrably this history should contain the psychodynamic relationships well-worked out. This would appear the height of fatuity, as the patient would ordinarily be regarded as the last person capable of grasping the significance of dynamic relationships. This is certainly not true and Federn has pointed out the fact that by very reason of the fact that the psychosis has loosened repressions the patient is to that extent less resistant to such perceptions. Certainly an actual demonstration in class gives much support to Federn's view. The writer has on a number of occasions read histories of patients present in the class, not mentioning names, or has read published case histories and the great interest manifested by the patients, their often unerring interpretations, sometimes in anticipation of the therapist, is an object lesson in the complexity of the human personality. Even a psychiatric article dealing with a fundamental problem is attentively heard by the patients and abundantly commented upon. The writer recently read such an article to the class from the American Journal of Psychiatry (Tiebout[13]) dealing with the rigid, omnimpotent personality that underlies problem drinking. The patients' intense interest, com- of them felt personally involved. As unorthodox as this procedure may be, it resembles in some respects the psychoanalytic technique of giving an interpretation when the situation warrants it.

(3)Autobiographies

Schilder gave detailed directions to his small groups on the writing of their detailed biographies, which were used in the group sessions. Working with small groups of 6 to 8 and closely adhering to psychoanalytic technique such a method constitutes intensive group psychotherapy. It must also be remembered that Schilder exercised considerable selectivity in the choice of patients for particular groups. Under the usual conditions of group practice in a large mental institution and with large groups of patients the practice of such intense psychoanalytic psychotherapy is less feasible.

(4) Discussion

As patients become assimilated into and part of the therapeutic milieu they will begin to ask questions on almost all subjects alluded to in class. Therapist directs discussions, amplifies and interprets statements; makes addenda and corrections, and so supervises the discussions that they do not run too far afield. Questions patients direct toward therapist are very significant in the questioner's mental conflicts, and where conditions permit may be followed as a clue to the psychodynamic situation.

(5) Symposia and Debates; Assignments

Often the class will touch upon controversial subjects and such a topic, it may be seen, may be best handled as a symposium or debate. Sides may then be chosen, and the contestants may be given references and assisted by the librarian and other interested parties. At the appointed time the debate it held. Sometimes, as occasion dictates, book reports and other assignments are made and delivered to the class at the appointed time. Thus one patient delivered a creditable chalk-talk on meteorology. Another patient, assigned the subject of alchemy, brought in a thesis on the subject, neatly typed and bound, and for some time after leaving the institution continued to be an enthusiastic hobbyist in historical library research on alchemy.

The value of these activities to the patients in an institution resides not alone in the enlargement of their fund of knowledge, but generally in the extrovertive activities which they tend to engender and foster, and the better relationships and rapport which they help establish and maintain with the institution's personnel. Contrast this with the regimen which may otherwise prevail where patients are given much time and opportunity to brood over their grievances, fancied and real, the delusional systems allowed to luxuriate ad libidum, the gulf between themselves and the personnel ever widening, the patients regressing ever backward along the route of mental deterioration.

(6) Didactic or Pedagogical Group Psychotherapy

In administering group psychotherapy the writer, giving consideration to the conditions existing in the large mental institution felt the

desirability of certain provision for the classwork.

(a) Group psychotherapy should include a program of reeducation and even edueation in the ordinary, academic sense.

(b) It is desirable to have a comprehensive program which can be taken over by another therapist as circumstances demand, and upon short notice.

(c) A method of administration which will provide a constant source of discussion and study, and hence does not embarrass a new therapist or even the experienced therapist as to choice of material.

(d) As far as possible to provide a uniform standard of application.

It is interesting at this point to recall that Marsh in 1931 had made the following statement:

"Institutions for mental patients should be considered 'schools' rather than hospitals. The author's experiment has demonstrated that mental patients can be instructed in groups and thus receive the reeducation we have talked about.

"The mental patient should be regarded not as a patient, but as a student who has received a 'condition' in the great subject of civilization, as most of us understand it, and psychiatry should thus approach him with intent to reeducate rather than with an attempt to 'treat'."

Somewhere in his writings Marsh also suggests the desirability of a book written for the patient as a basis for group therapy.

However, as a result of the writer's consideration of the needs of intramural group psychotherapy he was led to devise a mimeographed textbook for group psychotherapy intended to supply a body of knowledge deemed beneficial in the patient's adjustment. The book has ten chapters.

1. Introduction
2. Objectives of Classwork
3. What Price Shame?
4. How it Began
5. Reason and Impulse
6. Mental Mechanism
7. The Natural or Biogolical Meaning of the Process of Thinking
8. Mental and Personality Development
9. Some Large-Scale Features of the Personality
10. How we Think

Experience has already shown that even the didactic (or pedagogical) group psychotherapy technique could profitably be subdivided into gradations, calibrated to the varying capacities and states of integration in the various patients. The present technique may be considered an upper grade practice for the less disturbed and more intelligent patients.

The therapist attempts to create an informal discussion group. Worthwhile digressions are encouraged, and all the means listed under the heading of reeducational therapy are employed.

The textbook is used as the connecting thread of the classwork and most of the digressions are suggested by the contents of the book. When no such collateral activities are being followed and the text is again taken up each patient in turn reads a passage aloud, and is then asked to recapitulate what he has read. The patient is not held strictly to account and pedantry is avoided as much as possible. Where the patient is unable to summarize his passage other patients come to the rescue and finally the therapist may interpret and amplify.

Practical demonstrations following theoretical discussions are given wherever possible. Thus when studying the chapter on biology the class is taken for a tour of the clinical laboratory, the apparatus explained and patients are shown slides under the microscope of various tissue cells and germs.

RELATION OF GROUP TO INDIVIDUAL PSYCHOTHERAPY

Experience so far would tend to indicate that there is some reciprocal relationship between the two modes of psychotherapy. Patients with whom a positive transference could only be established after months of individual therapy, if at all, may sufficiently overcome resistances under the influence of group emotion to make a working relationship with a therapist possible after few class attendanees. Thus V. N. (Group Emotional Formation Through the Infectiousness of the unconflicted Personality Constellation over the Conflicted one) proved extremely difficult to treat by individual means, yet, as it turned out, upon leaving the hospital, of his own accord he solicited personal interviews for the post-hospitalization period. Many patients will ask for personal interviews after the class session. We

may therefore assume that at the very least group psychotherapy constitutes an efficient preparatory course for more intensive individual psychotherapy.

That the group therapy may be an instrument possessing virtues in its own right, not entirely provided by individual therapy, is strongly suggested by such a patient as H. M. (Incorporation of Therapist's Personality into Patients' Ego-Ideal) whose strong aggressive and narcissistic drives would make treatment by individual therapy even more difficult. It may be logical to suppose that these drives are direct antagonists of the socially-oriented impulses. Class attendance immerses such a patient in the group emotion, and at least subjects her to processes of socialization. Sherman[14] hints at the same conclusion, and it would seem that our patient, H. M., bore a strong resemblance, as far as personality characteristics were concerned, to some of the merchant seamen who were the subjects of Sherman's paper. The latter states:

"The transference to the physician, whether positive or negative, is usually strong, and there is danger of both patient and physician losing sight of their goal, namely, to restore the lost ego functions, to regain a firm hold on reality.....In brief, the treatment may diverge from the primary goal of getting seamen back to sea. An even further danger in individual therapy is that for the physician who works with merchant seamen peculiar, gratifications are on hand. The seaman is such a pleasant fellow to work with; he is so intrigued with the opportunity to pour out his experiences to a medically interested and sympathetic ear; and the clinical material which he brings is so fresh and challenging, that the physician stands in danger of getting caught in the appeal of the work and neglecting other therapeutic paths.....

"There seems to be general agreement that individual psychoanalytic procedures do not fulfill all the therapeutic needs of the patient. All those problems and conflicts which come roughly within the domain of the social superego do not seem to get properly worked out. The patient, returned to society, may find that his relationship with people at large is still grossly distorted. Most of the group therapies seem to have aimed at correcting this deficiency in the individual analytic procedure....."

Thus it is quite possible that group treatment is more effective in certain areas which are relatively inaccessable to individual psychotherapy. It would appear logical, in the final analysis, that correction of deficiences of social attitudes were best attempted in a social setting.

RESULTS OF GROUP PSYCHOTHERAPY

It is rather difficult to measure the results of group psychotherapy objectively, since first, an accurate statistical evaluation would have to be made in regard to the occurrence of spontaneous improvements and recoveries. Secondly, at present, when every favorable patient is given electric shock or insulin therapy the role of group psychotherapy itself is difficult to abstract from the total.

Objective testing of the before-and-after variety is therefore inconclusive. A large number of patients including those on treatment with the shock therapies, tested with the Bell Adjustment Inventory showed marked improvements, with few exceptions, after about three months of group therapy. At present an attempt is being made to give mass Rorschacks at intervals.

In a series of ten cases wherein sterile water was given instead of insulin, and where much of the therapeutic effect may be assigned to group psychotherapy, excellent results were obtained.

In estimating results of group psychotherapy a thumbnail sketch of an individual case, we believe, will prove far more illuminating than a whole column of statistics.

H.D., a young woman mental defective, not of very low grade, has a speech difficulty, in addition to poor reading ability, and can hardly be understood when she attempts to read aloud. It is suggested she practice reading aloud. After some weeks there is a distinct improvement in her enunciation and reading ability. Questioning one of her wardmates, it is learned she has dutifully carried out instructions and has frequently read aloud to other patients. She is complimented in class on her diligence. When she is about to leave the hospital she speaks to therapist about some W.P.A. evening school which she expects to attend. Something like two years later, in 1943, when she comes on a visit to the institution she encounters therapist on the grounds. She informs him, amongst other things, with pardonable pride, that she has graduated from the aforementioned school and has received a certificate. She is working now and earning her own liv-

ing, likes her work, and is getting along fine.

Discouraged and resigned to the fate which her disabilities seemed to impose, she would have remained a helpless charge on the state, sinking ever deeper into a slough of indifference and despond, had not her class attendance served to strike a spark of initiative by which she has since been enabled to utilize her scanty native capacities.

CONCLUSIONS

1. Group psychotherapy is a means of controlling group emotion and formation to the end that positive transferences of patients to therapist and between patient and patient are brought about. Some major psychodynamics of group therapy are discussed. Because of this factor emotional acceptance of interpretations by therapist are facilitated to a degree practically inconceivable on the basis of the transitory relationships between doctor and patient as they usually occur in the ward practices of a large mental institution.

2. Not only will patient thus be allowed a measure of emotional catharsis, but patients' problems are also subjected to a process of intellectualization or objectification. Thus, reflected tensions arising from social imagery can be appreciably lessened.

3. Group psychotherapy lends itself well to a didactic or pedagogical approach. A method of didactic group psychotherapy has been outlined.

4. It is possible that group treatment is more effective in certain areas which are relatively inaccessable to individual psychotherapy. It would appear logical, in the final analysis, that correction of deficiencies of social attitudes were best attempted in a social setting.

5. Results of group psychotherapy are easily appreciated, but as yet difficult to evaluate objectively in terms of statistics.

REFERENCES

1. Freud, S.: "Group Psychology and the Analysis of the Ego," London, International Psychoanalytic Press, 1922.
2. Redl, F.: "Group Emotion and Leadership," Psychiatry (White Foundation) V5, No. 4. Nov. 1942.
3. Masserman, J.: "Behavior and Neurosis." University of Chicago Press.
4. Alexander, F.: "The Voice of the Intellect is Soft. . ." Psychoan. Rev. V 28, No. 1, Jan. 1941.
5. Burrow, T.: "Social Images Versus Reality," Jr. of Abn. Psy. 19: 230-235 Oct.-Dec., 1924.
6. Syz, H.: "Remarks on Group Analysis," Am. Jr. Psychiatry 8: 141-148, 1928.
7. Federn, P.: "Psychoanalysis of Psychoses," 17: 1, 2, 3, Jan., Apr., & July, 1943 Psychiat. Quart.
8. Moreno, J. L.: "The Group Approach in Psychodrama," Sociometry, 5: 191-194, 1942.
9. Marsh, L. C.: "Group Treatment of the Psychoses by the Psychological Equivalent of Revival." Ment. Hygiene. 15: 328, 1931.
10. Shilder, P.: "Psychotherapy." W. W. Norton.
11. Wender, L.: "Dynamics of Group Psychotherapy." Jr. Nerv. & Ment. Diseases. 84: 54-60, 1936.
12. Lazell, E. W.: "The Group Treatment of Dementia Praecox," Psychoanal. Rev. 8: 168-179, 1921.
13. Tiebout, H.: "Therapeutic Mechanisms of Alcoholic Anonymous," Am. Jr. Psychiat. 100: 4, January, 1944.
14. Sherman, S.: "A System of Combined Individual and Group Therapy as Used in the Medical Program for Merchant Seamen," 100: 127-130:1, July, 1943.
15. Klapman, J. W.: "Group Psychotherapy; Theory and Practice." Gaune & Stratton, 1946.

185 N. Wabash Ave.
Chicago 1, Ill.

OCHRONOSIS-LIKE PIGMENTATION ASSOCIATED WITH THE USE OF ATABRINE

H. Saul Sugar, M.D.
CHICAGO, ILL.
AND
William W. Waddell, M.D.
BEATRICE, NEBRASKA

The deposition of a yellowish pigment in the skin associated with the ingestion of atabrine (quinacrine hydrochloride) over a prolonged period has been widely observed and studied[1, 2]. Pigmentation described as involving the sclera was observed by Hayman[3] in two cases following the use of atabrine. However, no published descriptions have appeared of pigmentation of other tissues associated with the use of atabrine. The observation of pigmentation of the hard palate, nailbeds and cartilages of the nose, ears, epiglottis and trachea, as well as of the skin, conjunctiva and corneoscleral limbus in ten soldiers who had received atabrine for a considerable peroid of time has prompted this preliminary report. These cases were observed during a period of four months.

CASE HISTORIES

Case 1. This 34 year old white male had received suppressive antimalarial therapy for a peroid of twenty-two months while serving in the South Pacific area. This consisted of 0.1 to 0.2 gram of atabrine daily. During this period he experienced one attack of malaria, in August, 1943. After returning to the United States, the use of atabrine was discontinued on November 1, 1944. A second attack of malaria began on December 28, 1944, at which time patient was hospitalized. *Plasmodium vivax* was demonstrated in blood smears. At the time of

From the Barnes General Hospital, Vancouver, Wn. (U. S. Army).

examination the patient stated that he had noticed a greyish-blue discoloration of the sides of the nares during the past two months. Examination on Jan. 2, 1945 revealed a yellowish discoloration of the skin, a bluish discloration of the bony palate, the sides of the nares, the finger- and toe-nails, the epiglottis, the tracheal rings, and brownish patchy pigmentation of the conjunctiva. The visual acuity was normal. No pathology was found in the ocular fundus. Repeated urinary examinations for homogentisic acid were negative. The Kahn test for syphilis was negative. Roentgen examination of the chest revealed no pathology. Atabrine was administered in doses of 0.2 gram every six hours for 5 doses, then 0.1 gram thrice daily for six days. Recovery was prompt. On May 2, 1945, four months after the first examination, the patient informed the authors by mail that the pigmentation of the finger- and toe-nails had completely disappeared but that he had not noticed any change in the discoloration at the sides of the nares.

Case 2. This 27 year old white male was hospitalized in June, 1944 because of a shrapnel wound in the abdomen. He received suppressive antimalarial therapy for a peroid of twenty-two months, consisting of one 0.1 gram atabrine tablet daily from February to July, 1943, and five 0.1 gram tablets twice weekly until November 21, 1944. During this period two attacks or malaria had been experienced, one in February, 1943, the other in October, 1943. During the period of hospitalization, two attacks of malaria occured, the first in January, 1945, the second in April, 1945. Both attacks were treated with atabrine in doses of 0.2 gram every six hours for 5 doses, then 0.1 gram thrice daily for six days. Examination on April 9, 1945 revealed marked yellow-brown pigmentation of the skin, hard palate, nail-beds, epiglottis and tracheal rings, and gross and biomicroscopically visible yellow-brown of the conjunctiva in the interpalpebral fissure area. The visual acuity and ocular fundi were normal. Repeated urinary examinations for homogentisic acid and melanin were negative. The Kahn test for syphilis was negative. Roentgen examination of the chest and spine revealed no pathology. A diagnosis of atabrine "ochronosis" was made.

Case 3. This 36 year old white male had received suppressive antimalarial treatment consisting of 0.1 to 0.2 gram of atabrine daily for two and one-half years. He had never had any attack of malaria. He was hospitalized because of infectious hepatitis. At the time of our examination the icteric index had returned to normal. Examination revealed the presence of marked yellowish discoloration of the skin, a bluish discoloration of the bony palate, the finger- and toe-nails, epiglottis and tracheal rings, and gross yellow-brown pigmentation of the conjunctiva in the interpalpebral fissure area as well as in the plica semilunaris and caruncle on both sides. The visual acuity and ocular fundi were normal. Repeated urinary examination for homogentisic acid and melanin were negative. The Kahn test for syphilis was negative. Roentgen examination of the chest and spine revealed no pathology.

Case 4. This 24 year old white male was hospitalized in October, 1944, because of a fractured metatarsal bone. He had received suppressive antimalarial therapy for a period of 21 months, consisting of one to two 0.1 gram atabrine tablets daily. Until the time of examination on March 28, 1945, he had experienced approximately 12 attacks of fever. He first noticed and became concerned about blueness of his fingernails and toenails in February, 1945. On examination there was yellowish pigmentation of the skin, bluish pigmentation of the hard palate, nail-beds, tracheal rings and gross and biomicroscopically-visible yellow-brown pigmentation of the conjunctiva in the palpebral fissure area. The visual acuity and ocular fundi were normal. Repeated tests for urinary excretion of homogentisic acid and the presence of melanuria were negative. The Kahn test for syphilis was negative. Roentgen of the spine showed no pathology.

Case 5. This 36 year old white male was hospitalized on April 27, 1945 because of an attack of malaria. He had received suppressive antimalarial therapy consisting of 0.1 to 0.2 gram of atabrine daily for a period of thirteen months ending in September, 1944. During the following seven months he experienced one attack of malaria each month, each attack being treated with atabrine for a period of approximately one week in doses of 0.2 gram every six hours for 5 doses, followed by 0.1 gram thrice daily for six days. On examination there was yellowish pigmentation of the skin, bluish discoloration of the hard palate, nail-beds, epiglottis and tracheal rings and gross and biomicroscopically-visible yellow-brown pigmentation of the conjunctiva in the palpebral fissure area. The visual acuity and ocular fundi were normal. Urinary tests for homogentisic acid and melanin were negative. The Kahn test for syphilis was negative. Roentgen examination of the spine showed no pathology.

Case 6. This 37 year old male of Mexican descent was hospitalized in November, 1944, on Leyte because of a shrapnel injury to his right shoulder. He had received suppressive antimalarial therapy consisting of 0.1 to 0.2 gram of atabrine daily for eighteen months. He had discontinued its use a week before our examination. There had never been any attacks of malaria. Examination revealed marked greenish yellow pigmentation of the skin, bluish discoloration of the hard palate, nail-beds, tracheal rings, and epiglottis, and gross yellow-brown pigmentation of the conjunctiva in the palpebral fissure area as well as the plica semilunaris and caruncle on each side. A biopsy of one plica semilunaris was taken. This revealed the presence of dark brown granules of pigment in the basal layer of the epithelium and in the intercellular spaces, as well as subepithelially, both intra- and

extracellularly. The Director of the Army Institute of Pathology considered the intensity of pigmentation in one area greater than one would expect even in negroes. With hematoxylin and eosin stains, the granules varied considerably in size and were not as uniform as melanin but Masson's stain showed the black pigment usually considered to be melanin. With a staining technique described by Krajian the pigment behaved like melanin. Iron stains were negative. The visual acuity and ocular fundi were normal. Urinary tests for homogentisic acid and melanin were negative. The Kahn test for syphilis was negative. Roentgen examination of the spine revealed no evidence of arthritic change. This patient still had some pigmentation as described, two months later, but very markedly diminished in amount.

Case 7. This 29 year old white male was hospitalized for superficial thrombophlebitis of the left leg following a dermatitis. He had received suppressive antimalarial therapy consisting of one to two 0.1 gram tablets of atabrine daily for a period of two years. During this period he experienced two attacks of malaria, one in December, 1943, the other in April, 1945. These attacks were treated with 0.2 gram doses of atabrine every 6 hours for 5 doses, followed by doses of 0.1 gram thrice daily for six days. On examination on May 1, 1945, moderate yellowish pigmentation of the skin was found. There was bluish discoloration of the hard palate, nail-beds and tracheal rings, and gross yellow-brown pigmentation of the conjunctiva in the palpebral fissure area. The visual acuity and ocular fundi were normal. Urinary tests for homogentisic and melanin were negative. The Kahn test for syphilis was negative. Roentgen examination of the spine revealed no evidence of arthritic change.

Case 8. This 24 year old white male was hospitalized on November 27, 1944, because of a gunshot wound of the right shoulder. He received suppressive antimalarial therapy consisting of one to two 0.1 gram atabrine tablets daily for a period of one year, ending one week before our examination on May 1, 1945. He had never experienced an attack of malaria. On examination there was moderate yellowish pigmentation of the skin, bluish discoloration of the hard palate, nail-beds, and tracheal rings, and gross and microscopically-visible yellow-brown pigmentation of the palpebral fissure area. The visual acuity and ocular fundi were normal. Urinary tests for homogentisic acid and melanin were negative. Roentgen examination of the spine revealed no evidence of arthritic change.

Case 9. This 33 year old white male was hospitalized on January 7, 1945 because of headaches associated with hypertrophic rhinitis. He had received suppressive antimalarial therapy consisting of twenty-one 0.1 gram tablets of atabrine weekly for a period of five weeks beginning March 22, 1944, followed by one to two 0.1 gram tablets daily for a period of eleven months. During the two months after which atabrine was discontinued, he experienced two attacks of malaria, one in February, 1945, the other in April, 1945. Each attack was treated with atabrine in doses of 0.2 gram every six hours for 5 doses followed by 0.1 gram thrice daily for six days. On examination there was moderate yellowish pigmentation of the skin, bluish discoloration of the hard palate, some of the finger- and toenails, the tracheal rings, the lower part of the conchal cartilages, the inside of the nares, and gross and biomicroscopically-visible yellow-brown pigmentation of the conjunctiva in the palpebral fissure area. The viscal acuity and ocular fundi were normal. Urinary tests for homogentisic acid and melanin were negative. Roentgen examination of the spine revealed no evidence of arthritic change.

Case 10. This 30 year old male of Mexican descent was examined on May 3, 1945. He had been hospitalized on Luzon since January 24, 1945 because of a shrapnel injury to his left shoulder. He had received suppressive antimalarial therapy consisting of daily doses of 0.1 gram of atabrine for two and one-half years beginning in January, 1943. Examination revealed marked greenish-yellow pigmentation of the skin, bluish discoloration of the hard palate, nail-beds, tracheal rings, and gross yellow-brown pigmentation of the conjunctiva in the palpebral fissure area. The visual acuity and ocular fundi were normal. Urinary tests for homogentisic acid and melanin were negative. Roentgen examination of the spine revealed no evidence of arthritic change.

COMMENT

The cases described showed pigmentary deposits of rather characteristic distribution involving the skin, conjunctiva, hard palate, nail-beds and one or more of the cartilaginous structures such as the ears, nose, epiglottis and tracheal rings. All of the patients were males between the ages of 24 and 37 years, averaging 30 years of age. None had symptoms referrable to the pigmentation itself. The dark discoloration of the cartilages immediately suggested a similarity to alkaptonuric ochronosis. However, none showed evidence of alkaptonuria or melanuria or any roentgenographically-visible arthritic changes. The age group contrasted sharply with alkaptonuric ochronosis in which the age average is 58 years[4] and with carbolochronosis in which the average age is 52.45 years[5].

True ochronosis is a rather rare disease. Since the first description by Virchow[6] in 1866, only about 85 cases have been recorded in medical

literature. Two forms of the disease occur: 1) and endogenous form, an inherited metabolic disorder associated with alkaptonuria, and 2) an exogenous form, resulting from phenol or benzene poisoning and not associated with alkaptonuria. The exogenous form (carbolochronosis) was first described in 1906 by Pick[7] in a patient following prolonged application of phenol dressings to leg ulcers. Since Pick's report, approximately 20 cases of exogenous ochronosis have been described. Mills[4] mentioned a case following prolonged use of picric acid in the treatment of extensive burns.

Aside from the urinary findings, both forms of ochronosis are characterized early by bluish discoloration of the ear cartilages and grey or brown pigment spots in the sclera near the insertion of the rectus tendons. A butterfly-shaped brown pigmentation of the skin of the face may be present. The tendons of the hands and feet may have a bluish discoloration in advanced cases. Rarely there is brown pigmentation of the thenar and hypothenar eminences. Arthritic changes commonly are found in the spine, pelvis, shoulders, knees and costal cartilages. A greenish-brown color may be imparted to the auxilary sebum and a brownish-black color to the cerumen. Post-mortem examinations have also revealed pigmentation of the rib cartilages, intervertebral discs, symphysis pubis, perichondrium and periosteum as well as pigmentation in the intima of large vessels.

In the cases of pigmentation associated with the prolonged use of atabrine, the pigmentation of the cartilages of the epiglottis, trachea, nose and ears is the chief similarity between the syndrome herein described and ochronosis. The only other similarity in pigment distribution is conjunctival involvement in the two conditions. In none of our cases associated with the use of atabrine was any scleral involvement noted. Conjunctival pigmentation in ochronosis has been best described by Smith[8]. He found the conjunctiva slightly involved in some cases but that corneal pigmentation near the temporal and nasal limbi was diagnostic.

The pigmentary deposits associated with the prolonged use of atabrine are most characteristically seen as a grey-blue discoloration in the bony palate where it ends as a sharp line at the transition to the soft palate. A grey-blue pigmentation of some or all of the nail-beds is the next most obvious sign. This is manifested either as a transverse band at or near the middle of the nail or as a diffuse discoloration of the entire nail-bed. The next most obvious finding was pigmentation of the conjunctiva in the palpebral fissure area. This was present in every case. The conjunctival pigment extended in patches of varying size from the nasal and temporal sides of the cornea and involved the corneal limbus nasally and temporally, less frequently below, and in two cases in the present series involved the plica semilunaris and caruncle. The pigment appeared to lie at somewhat varying depths. Based on the biopsy findings in case 6, the pigment lies both in the basal layer of the epithelium and below it. The pigment patches are composed of both yellow-brown, diffuse, finely granular pigment and more coarsely granular dark greenish-brown pigment. The darker pigment appears to take a linear or figure arrangement with rounded or scalloped margins. The oil-droplet-like pigmentation of the cornea described by Smith was not seen.

Because of the difficulty experienced in distinguishing the conjunctival pigment from melanin clinically, a series of 40 patients who had been on atabrine therapy for varying periods of time without evidence of palate, nail-bed or cartilage pigmentation were examined biomicroscopically and compared with another series of 40 patients who had never been on atabrine therapy. Nearly all patients were battle casualties from either the European or Pacific theatres of war.

The 40 controls were males between the ages of 21 and 53. Twenty-eight had skin of light color, 6 were Negroes and 4 were of Mexican descent and somewhat dark-skinned. Conjunctival pigmentation indistinguishable clinically from the pigmentation found in the patients with palate, nail-bed and cartilage pigmentation was present in the dark-skinned individuals. Of the 30 remaining individuals with light skins, 24 showed no pigment patches in the interpalpebral fissure area while 6 showed small patches of yellow pigment.

Of the 40 patients who had been on atabrine for varying periods of time, only 3 showed no conjunctival pigmentation. Of the latter, one had discontinued atabrine one week previously; the second, five months previously; and the third six months previously (See table 1). This group

Table 1. The Presence of Conjunctival Pigmentation in Individuals after Use of Atabrine for Varying Periods of Time.

No.	Duration of Atabrine Administration	Length of time since Discontinuance of Atabrine	Presence of Conjunctival Pigmentation (Present if not otherwise stated
1	2 years	1 week	0
2	17 months	3 days	
3	15 months	2 weeks	
4	32 months	5 days	
5	23 months	7 days	
6	6 months	1 week	
7	1 month	5 months	0
8	2 years	0	
9	16 months	0	
10	6 months	0	
11	11 months	2½ months	
12	1 year	5 days	
13	11 months	5 months	
14	18 months	0	
15	3½ months	9 months	slight
16	18 months	0	
17	14 months	0	
18	5 weeks	3 Months	slight
19	15 months	1 week	
20	2 years	0	
21	1 year	1 week	slight
22	7 months	1 month	
23	30 months	15 days	
24	8 months	7 days	
25	7 months	16 days	
26	6 months	7 days	
27	16 months	7 days	
28	7 months	1 month	
29	3 months	2½ months	
30	9 months	0	
31	9 months	0	
32	11 months	6 months	0
33	8 months	0	
34	1 year	1 week	
35	6 months	2 days	
36	9 months	7 days	
37	8 months	7 days	
38	7 months	15 days	
39	16 months	7 months	
40	7 months	1 month	

consisted entirely of light-skinned males between the ages of 20 and 36 years.

Comparison of these two groups indicates that, in light-skinned individuals at least, the use of atabrine tends to cause a pigment deposition in the conjunctiva. In very dark-skinned individuals the distinction between pigmentation associated with atabrine and melanin pigmentation is clinically impossible.

The localization of the pigment in the palpebral fissure area suggests that light is possibly a factor in the deposition of the pigment, just as in the skin where the pigmentation is more accentuated on the exposed surfaces of the body, particularly the arms, hands, feet, and face.

The observations in this small series of individuals with atabrine-associated pigmentation of the conjunctiva suggest that pigment may remain as long as nine months after discontinuing the use of atabrine, although it was absent, and presumably had disappeared in other individuals five or six months after discontinuing the drug. By analogy with the disappearance of skin pigmentation it may be assumed that conjunctival atabrine pigmentation may persist for about six months or more after discontinuing the drug, although Schechter and Taylor[1] reported the skin pigmentation to persist only as long as eighteen weeks.

The possibility that malaria itself might account for the pigmentation described merits consideration. However, not all of the patients experienced malarial fever, nor has this particular type of pigmentation ever been described in malaria patients treated with other antimalarial drugs[2].

The mode of production of the pigment associated with the use of atabrine and its nature are unknown. Pick, in considering cases of carbolochronosis, suggested that phenol substances are changed through the action of the oxidative ferment tyrosinase into a melanin pigment which is deposited in the tissues. The chemical similarity of tyrosine, epinephrine, thyroxine, diiodotyrosine, and dihydroxyphenylalanine (Dopa) has added weight to the belief that tryosine is in some way related to pigment metabolism. Atabrine, however, differs from the above-mentioned substances. It is a condensed heterocyclic compound derived from acridine.

Pigmentation associated with the use of atabrine requires no treatment and is important only in differential diagnosis. The pigmentation may cause considerable concern to some patients as it did in cases 1 and 4. Among the conditions with which it may be confused are carotinemia, Addison's disease, icteric disease, picric acid poisoning, carbolochronosis, and alkaptonuric ochronosis. Except for the latter three conditions only the skin pigmentation could be cause for confusion since pigmentation of cartilage does not occur in them. Carotinemia tends to cause deeper pigmentation of the palms and soles as distinguished from pigmentation associated with atabrine in which the dorsum of the hands is

more deeply pigmented[2]. The absence of any history of work with TNT or of use of phenol dressings would rule out exogenous ochronosis. The absence of alkaptonuria in patients with pigmentation of the cartilages rules out alkaptonuric ochronosis.

SUMMARY

A hitherto-undescribed ochronosis-like pigmentation, associated with the ingestion of atabrine, was observed in 10 individuals who had been treated with the drug for a considerable period of time. It was characterized by pigmentation of the skin, hard palate, nail-beds, and cartilages of the nose, ears, epiglottis, and trachea, as well as pigmentation in the conjunctiva, and corneoscleral limbus. The nature of the pigment is unknown. Its importance is primarily in differential diagnosis.

58 E. Washington

REFERENCES

1. Schechter, A. J. and Taylor, H. M.: Atabrine pigmentation. Amer. Jour. Med. Sci., 192: 645, 1936.
2. Jeghers, H.: Pigmentation of the skin, New Eng. Jour. Med. 231: 88, July 20, 1944; 231: 122, July 27, 1944, and 231: 181, Aug. 3, 1944.
3. Hayman, J. M.: Atabrine Pigmentation of the Sclera: The Bulletin of the U. S. Army Medical Department, No. 82, Pg. 121, Nov. 1944.
4. Howard, C. P., and Mills, E. S.: Ochronosis, Oxford Medicine, N. Y. Oxford University Press, 1941, vol. 4 pt. 1 p. 223.
5. Oppenheimer, B. S. and Kline, B. S.: Ochronosis. Arch. Int. Med. 29: 732, 1922.
6. Virchow, R.: Ein Fall von allgemeiner Ochronose der Knorpel und knorpelahnlichen Teile. Virchows Arch. f. path. Anat. 37: 213, 1866.
7. Pick, L.: Uber die Ochronose. Berl. Klin. Wochenschr. 43: 478, 1906.
8. Smith, J. W.: Ochronosis of the sclera and cornea complicating alkaptonuria. Jour. Amer. Med. Assoc. 120: 1282, Dec. 19, 1942.

The patient was sitting up for the first time. "I wouldn't let them operate on me again for a million dollars," he groaned.

"I'm sorry," said the doctor to the patient, "but I shall have to operate on you again."

The convalescent let out a roar.

"Nothing doing," he cried, "I won't stand for it."

"But," argued the doctor, "It's something that just has to be done. You see, I made a serious mistake. When I stitched you up I left one of my rubber gloves inside you."

The patient was incredulous.

" Is that why you want to open me again?"

"Yes," said the surgeon.

The patient smiled feebly.

"Don't be daft, man," he said. "Here's a quarter—go and buy yourself another rubber glove."

—*Tatler & Bystander*, London.

EXAMINATION OF THE BREASTS AND PELVIC ORGANS IN APPARENTLY WELL WOMEN

Review of the Findings in 1600 Women Examined at the Cancer Prevention Clinic

AUGUSTA WEBSTER, M.D., M. ALICE PHILLIPS, M.D., LUELLA NADELHOFFER, M.D., MARGUERITE OLIVER, M.D., and ELOISE PARSONS, M.D.

CHICAGO

A cancer prevention clinic was organized in Chicago on May 13, 1943. This was sponsored by the American Cancer Society through its educational unit, The Field Army. A committee from the Chicago Medical Society acts in an advisory capacity. Clinic space is provided through the generosity of the Board of the Women and Children's Hospital. A review of the first 600 cases examined was previously reported[1] and this review includes those and an additional 1000 cases which have been examined and analyzed.

The purpose of this clinic is to educate the public to the value of a complete periodic physical examination, with the view of early detection of cancer or precancerous lesions. If suspicious lesions are detected, the patient is sent to her family physician for treatment. No treatment is given at the clinic. Biopsies are not made because it is the belief of the clinic staff that the private physician should have control over the diagnostic procedures, as well as, the plans for treatment. Patients are not accepted who are under treatment for cancer. The object of the clinic is to detect early cancer, and to encourage periodic examinations. The purpose is *NOT* to check upon the diagnosis of other institutions or individual physicians.

The procedure consists of a thorough physical examination and laboratory tests consisting of routine hemoglobin, blood count, blood smear, urinalysis, blood serology, urethral and cervical smears, Papanicolaou's vaginal smear and fluoroscopic examination of the chest.

In the course of these examinations many constitutional diseases, in no way related to cancer, are, of course, observed. Whenever any abnormality is detected, the patient is told of the general nature of the condition, and is advised to consult her family physician regarding care.

In reviewing the statistics, it must constantly be born in mind that only *apparently well wom-*

en are accepted for examination. Whenever the inquirer states that she has any symptom whatsoever, she is urged to consult her own physician at once, and not to wait for an appointment several months hence. This accounts for the relatively small amount of gross pathology found.

On the other hand, an effort is made to report all findings which deviate from the normal, even though they are not considered to be related to cancer. These patients are all referred to their private physician, even though there is no urgency for treatment. This attitude is taken because when the examination is completed this clinic has no further contact with the patient, for she is either discharged or referred to her own physician for observation and treatment.

Examination of the Breast. Breasts were examined by palpation and transillumination. No biopsies were taken in the clinic. The same careful examination was made of every woman whether she had any complaints referable to the breasts or not.

In the first 600 cases examined there were ten (10) proved cases of carcinoma of the breast. In the next 1000 cases there were no obvious carcinomas found, and only 11 women in whom biopsy was requested. No malignancy has been reported in this group. This apparent discrepancy is due to the fact that contrary to plan, some of the patients in the first group had known symptoms which brought them to the clinic. When the clinic was new, and patients could be seen promptly, a few with symptoms obtained appointments. Now with the appointments filled for five months in advance, such individuals are urged to see their own physicians without delay. Furthermore, there may be positive malignancies in the second group that have not been reported by the private physicians.

In the second group 42 women came in for check-up of the breast because of previous surgery. These were for the most part women who had moved away from their family physician, or whose physician was in service. It is interesting that they were well trained, and knew the importance of having the condition checked at regular intervals. The number of biopsy scars (27) present, indicate that the general practitioner is on the alert for carcinoma, and is making an effort to establish an early diagnosis.

TABLE 1

Number of Cases	600	1000	1600
Proved Carcinoma	10	0	10
Complaints			
Pain in the Breast	42	53	95
Lumps in the Breast	26	20	46
Findings			
Lumps in the Breast	24	16	40
Indefinite induration	8	9	17
Biopsy Requested	19	11	30
Biopsy Reported	18	10	28
Benign	8	10	18
Malignant	10	0	10
Previous Surgery			
Mastectomy	8	15	23
Incision simple	4	27	31

Pelvic Examinations. Gynecological complaints were not the symptoms which brought these women for examination. In the first 600 women examined there were only 99 who admitted any complaint referable to the generative tract. In the next 1000 examinees there were only 285 pelvic complaints elicited on close questioning, and many of these were multiple in the same patient. The complaints are listed in Table 2.

TABLE 2

Symptoms	First 600	Next 1000	Total 1600
Pain			
Low abdominal or pelvic	13	54	67
Backache	6	32	38
Profuse Menses	11	33	44
Irregular Menses	3	36	39
Bloody Discharge (not at menses)	12	0	12
Vaginal Discharge	18	64	82
Irritation of Genitals	8	1	9
Lump in Vagina	3	1	4
"Womb Trouble"	3	7	10
Tumor Suspected	12	15	27
Dyspareunia	2	3	5
Sterility	3	2	5
Hot Flashes	15	38	53

A bimanual examination, and visualization of the cervix was done in the course of the general physical examination. An aspiration of the cervical secretion was taken for a special Papanicolaou stain for cancer cells. Cervical and urethral smears were made in all cases. Hanging drops were studied, when indicated, for motile organisms. No biopsies were taken. A second examination was made by a consultant gynecologist on all cases in which there was any deviation from the normal.

The findings listed in Table 3 include all

pathology observed, whether or not symptoms were present.

TABLE 3

Pelvic Findings

Findings	First 600	Next 1000	Total 1600
External Genitals			
Kraurosis	1	1	2
Senile Pruritis and Vaginitis	16	47	63
Sebaceous cyst of labia	3	3	6
Lichenification	1	3	4
Enlarged Bartholin Gland	4	5	9
Urethral Caruncle	3	13	16
Vaginal Cyst	1	1	2
Cystocele with Symptoms	29	10	39
Cervix			
Lacerated or Hypertrophied	16	101	117
Erosions	73	126	199
Polyps	19	31	50
Trichomonas with Symptoms	5	20	25
Corpus			
Retroverted	18	56	74
Nodular Enlargement (fibroids)	35	41	76
Prolapse with Symptoms	13	10	23
Adnexal Mass or Enlarged Ovary			
Right Side	4	13	17
Left Side	5	20	25
Bilateral	5	7	12
Tumor of Abdominal Wall	1	1	2
Stricture of Vagina	1	1	2

The group of lacerated cervices with hypertrophy are listed, but they indicate only trauma of childbirth. Of the 199 cases of erosion many consisted of a slight redness around the external os, and only a few needed treatment. Of the 126 erosions in the last 1000 women examined biopsy was advised in thirteen. Reports received to date from private physicians have not indicated that any cervical carcinoma has been found.

Of the 41 fibroids present in the last 1000 cases, 16 were of such size that surgery seemed indicated. 80 patients in the last 1000 had previous hysterectomy, of these 68 were subtotal and 12 total. In none of these had the uterus been removed for carcinoma, and there was no evidence of malignancy found in the remaining cervices.

SUMMARY

The breast and pelvic findings in 1600 examinees seen in the Cancer Prevention Clinic are reviewed.

The purpose of this clinic is to educate the public to the value of a complete periodic physical examination with the view of early detection of cancer or precancerous lesions.

No treatments are given, and no biopsies are done by the clinic.

All pathology is referred to the private physician for final diagnosis and treatment.

A small number of definite malignancies and numerous other pathologic lesions were found and reported.

The final diagnosis is dependent upon biopsy which is done by the private doctor, and all of these physicians have not sent in their findings.

Therefore, the number of positive malignancies is probably greater than is reported.

BIBLIOGRAPHY

1. Illinois Medical Journal, Vol. 87, No. 3, 1945.

★ Look for
Candid Camera Pictures
of The Annual Meeting
in the August issue

Industrial Health

Committee On Industrial Health — Jos. H. Chivers, Chm., 836 S. Michigan Ave., Chicago 5, Frank P. Hammond, H. A. Vonachen, R. I. Barickman, C. O. Sappington, Milton H. Kronenberg.

The increasing importance of psychiatric study in the employee relations program of industry has become more evident in the past few years. The following article from the December, 1945 *issue of the Canadian Medical Journal clearly emphasizes the value of this study in its application to the every day life of the workman.*

PSYCHIATRY IN INDUSTRY

D. Ewen Cameron, M.D.
Professor of Psychiatry, McGill University,
MONTREAL

Industrial psychiatry is a new but rapidly growing field. While new it is, none the less, an expression of a trend which has been assuming increasing proportions in medicine for a number of decades. This trend consists in the mounting emphasis laid upon the human factor, in illness, in therapy and in prevention. Since the most active part of the individual's day is spent at work, and since many of his major satisfactions and frustrations are met there, psychiatry has begun to find in industry an increasingly important field for work.

There is nothing remarkable in the fact that industrial psychiatry should be growing rapidly. It is a natural sequel to the establishment and expansion of industrial medicine. Just as the medical school, the general hospital and the medical services of the armed forces have found that psychiatry must be incorporated, and prominently incorporated, in their work in order that the modern attack on medical problems may be carried through to success, it is being found that psychiatry must also be brought into the industrial medical team.

It is already possible to discern three main fields in which the industrial psychiatrist is beginning to work and to make definite contributions.

These are teaching, clinical practice and research. It is hard to say which of these is the more fruitful. During the last two years we have had in this area considerable experience in teaching in the broad sense, or perhaps I might better say in transmitting information concerning the behavior of people at work. A series of lectures has been given in the last two years, first to large groups which selected themselves primarily upon the basis of their interest in human problems arising in industry and then, later, to groups of foremen and of managerial personnel.

The material presented to the first group consisted very simply in the basic facts concerning human behavior, how incentives work, what causes fatigue, the range of the emotional reactions. It is amazing how frequently one finds the belief that anxiety is something that the other fellow has, it is not the right thing for you yourself to have; to have it is to be "yellow": Likewise the fact that anxiety may cause a stomach upset or tachycardia is still news to more people than not.

The simple facts of monotony and repetition and their relation to tension have to be handed over, and until we can get the fundamentals of human behaviour taught in the schools with at least the same emphasis as the dates of the battle of Hastings and the signing of the Magna Charta, it will be necessary to go on teaching adults why they act as they do.

We have found these discussions of basic facts very valuable and are planning to expand them. As proof of their general value may be instanced the fact that to explain to men the meaning of the reactions to fear, the way in which groups take form and leadership appears, the effects of frustration and of long continued insecurity, has in the armed forces been of clear value in protecting those men against psychological damage.

While such fundamental information is needed at all levels in the industrial organziation, each level has a special series of problems for which special information is of value. Last year we found a remarkably large response to a series of lectures given to foremen and managerial personnel on supervision. Among the matters dealt with were the causes of complaints, not merely the obvious and understandable complaints arising from long hours and inadequate pay, but those which arise just as certainly but less obviously from repetitious work, from psychological difficulties which actually have their true origin quite outside the industry, perhaps in the individual's earlier life, perhaps in rows with his wife or resentments against his parents.

During such discussions a fact which should actually be self-evident must be brought out, namely that any job analysis which is limited to speed, number of repetitions, degree of coordination, range of movement, amount of lifting, temperature and humidity, is indeed limited. To be a thorough-going analysis it must include the data as to whether the job can give satisfaction to the worker and to what kind of worker, whether it can give him an outlet for self-expression. We have still to learn that you cannot break down a process into separate "operations" on the basis of what is suitable for the machines and assume that the breakdown will also be suitable for the worker. We have still to add to our mechanical and physiological analysis a psychological evaluation.

In this transfer of information it is clear that among the groups to whom transfer must be made are the industrial physicians and surgeons and the industrial nurses. Up to this point we have been talking exclusively of the transmitting of information as a means of preventing difficulties. Simply put, the more a man knows about himself and his fellows, the less likely it is that frictions and frustrations will occur. The more that those who are in supervisory and managerial positions know about human behaviour—its motivations and aggressions—the better job will they be able to do.

Once signs of wear and tear, of decreased effectiveness or actual breakdown have occurred it is necessary to turn to different groups, namely to the medical and nursing personnel.

Let me state the most important fact first and very simply. The vast amount of mental ill health and incipient behavioral breakdown is not recognized for what it is. You will notice that I have used, where possible, alternative phrases in place of mental breakdown and mental diseases. The reason is that there is still far too great a tendency to think of the major disorganizations as being the only representatives of psychological breakdown. Implicit in far too many minds is the assumption that man has either got dementia præcox or there is nothing wrong with him of a psychiatric nature.

The reason for this curious situation is to be found in the medical school teaching of two or three decades ago. At that time, if the student was given any instruction at all concerning human behaviour, that instruction was given by men whose professional appointments were in the mental hospitals where they encountered, for the most part, the exceptional cases of breakdown, the end results, and those patients who were so acutely disordered that they could not be managed outside a protected environment.

Now we are aware that the man going out into practice will encounter one or two instances a year at the most of people suffering from breakdowns of this acute or extensive nature, but that every day he will come across instances where psychological factors are playing an important and often a decisive part in the man's illness, and, as we move progressively towards an actively preventive medicine and towards social medicine, a live knowledge of human behaviour will become a very necessary part of the equipment of all physicians.

In industry we are now in the process of identifying those occupations which constitute the greatest psychological hazards to the worker or perhaps we should say that we are in the

process of identifying the particular kinds of jobs which are most hazardous for particular kinds of persons. For, when we are considering infectious diseases, it is the kind of microorganism that is of primary importance; the kind of person who is attacked is only of secondary significance for us when we plan prevention and cure. But when we set about similar planning concerning behavioral breakdowns we have to concern ourselves equally with the situation and with the person.

We can already identify certain trades which are dangerous to certain people. For almost all people, but more particularly for the tense individual who finds it hard to relax quickly and adequately between periods of pressure, those occupations which call for sustained utilization of a limited part of their equipment are apt to be harmful; the thousand times repeated inspection of one small part, the endless repetition of one limited operation, for instance one woman pasted a strip of paper on 18,000 paper bags every day.

Today we recognize that if we overload the man who is excessively set upon doing his job well, who cannot be content unless it is just so, we shall find that he begins to develop tension and anxiety, will lose confidence and concentration and will eventually have to stay off work. One thinks here of the senior bank clerk who did an outstandingly precise and reliable job when he had to take responsibility for his own work and that of a few efficient subordinates. When those workers were drafted and he had to take on responsibility for larger and larger numbers of inexperienced youngsters he came under progressively greater stain. He could not relax his standards; to have done so would have, in itself, created anxiety. Accordingly he worked longer and longer hours and kept himself under continually rising pressure in a vain attempt to check and supervise everything, with the result that he ultimately broke down into an anxiety state and at the end of two years was still unable to return to work.

Finally, though this is more difficult, we are beginning to recognize that it is hazardous in the industrial medical sense for certain types of personality to work with certain others. It is more difficult because it requires two separate personality evaluations. The simplest example of this is the situation where the subordinate is an insecure, unconfident person whose difficulties stem from a tyrannical father or domineering mother, and where the boss is an assertive, sadistic individual. During the last two years we have had occasion to see several instances of this and in each case the subordinate who happened to be a well trained and technically competent person became so disturbed that his services were lost to his organization.

This represents only part of the information which the industrial medical man must have. I have not stressed what I shall now refer to briefly, since this latter is knowledge required of all those in the practice of medicine, namely a proper recognition of the psychosomatic nature of illness. The last ten years have seen remarkable strides in this direction. Few would now try to evaluate complaints referred to the gastrointestinal tract or to assess tachycardia or precordial symptoms without raising the question in their own minds as to how far psychological factors may be contributing to the picture which the man presents. The manifestations of emotional tension are so protean, so widespread, that it is still difficult, even for those of us who are continually at work in this field, to recognize their full range.

For not only do we find tension manifesting itself in such hitherto unsuspected forms as blurring of vision, tinnitus, dizziness, postural kyphosis, and itching of the skin, but we find it playing a supporting role in a considerable number of other instances. In a recent joint symposium with the Section of Dermatology, it was the dermatologists who pointed out that ringworm was a more difficult problem in the tense anxious person whose hands and feet were continually wet and cold, it was they who pointed out that both eczema and psoriasis, whatever their essential cause, tend to get worse during periods of stress and better when the patient is more at ease.

At this juncture I should like to make the point that it is exceedingly important that the industrial physician should be well oriented in regard to this rapidly evolving field of psychosomatic medicine. It is a truism, but one that will bear repeating, that the vastly greater part of the practice of psychiatry is not going to be, and cannot be, carried out by psychiatrists. It

must be carried out by everyone who is engaged in the practice of medicine. You will readily see that by far the greater amount of bacteriology—the application of bacteriological principles and at least of the simpler techniques—is carried out by those who are not bacteriologists. These principles and techniques are carried out by surgeons, by physicians, by obstetricians and, indeed, in their simplest, but by no means least important forms, by housewives who insist on pasteurized milk, by the owners of provision stores who screen their products against contamination by flies, by anyone who cleans a cut and applies an antiseptic to a scratch. It is in this same sense that knowledge concerning human nature must be incorporated into the procedures of every medical man and, indeed, into the common dealings of people with each other.

What are the special clinical contributions which psychiatrists can make within industry? First he should form part of the medical team examining all new employees. As is well known, this was done with great benefit in the induction of men into the army, both in Canada and in the United States. Of all the methods of estimating the stability of the individual the interview remains the most effective. During it the quite infrequent individual suffering from one of the major breakdowns can be discovered. Of far greater importance is the opportunity which it affords to identify the very large number of individuals who suffer from inadequate mental health or from recurrent psychosomatic illness. Their identification should, by no means, entail their automatic rejection. In the majority of instances they will be found capable of reasonable working efficiency but it is of importance that they should be known to the medical and personnel departments and that their capacities should also be a matter of record.

Finally the industrial psychiatrist familiar with actual breakdowns is also familiar, from his study of the development of the early stages of these breakdowns, with the personality traits which render such a person prone to experience difficulties under given situations. As stated earlier he knows that the over-conscientious, precise and rigid person does not do so well in jobs which result in his being pushed beyond his usual tempo of work. By recognizing the existence of such personality traits during the medical examination he can assist, through recommendations as to placement, and thus serve to prevent subsequent breakdowns.

I shall not spend time in discussing the obvious place of the industrial psychiatrist in dealing with referrals and with those requesting interviews. This involves a range of problems as wide as human difficulties themselves. Among them, however, two groups assume major proportions due to characteristics fundamental to the nature of industrial life. The first group is comprised of those who suffer from tension and anxiety due to the current widespread existence of rapid repetitious jobs, the hall marks, as it were, of mechanization and also to the equally widespread existence of jobs stripped of psychological satisfaction in the process of breaking a procedure down into a series of operations fitted to the needs of the available mechanical processes rather than to the needs of the worker. The second major group of those requiring assistance is comprised of men and women who find difficulty in managing personal relations at work, relations which differ in many important aspects from those found in the home and those which the individual usually maintains with his friends and acquaintances.

Finally, a large and exceedingly important field for work is opening up for the industrial psychiatrist in research. A great deal of work requires to be done on problems of selection. The knowledge and technique of many different kinds of personnel are required for successful work in this field. The experience of the psychiatrist and the methods which he has worked out for evaluating human personality are of the greatest value.

It is not too much to say that adequate selection and placement will go far, not only in increasing effectiveness but in cutting down the widespread mental ill health which exists. A second problem which can serve to illustrate the range of industrial psychiatric research is that of the investigation of psychologically hazardous occupations and the study of situations in which an unusually high degree of maladjustment and mental ill health develops. We are all familiar with the fact that a certain department or a given office may become outstanding because of the amount of interpersonal friction,

because of the amount of absenteeism, psychosomatic illness, of poor morale with develops among the personnel who work in it. We already know in a rather superficial way some of the causes—inadequate supervision, unduly large numbers of poorly adjusted persons in the group, frustrating work conditions—but there are undoubtedly many more which await identification and remedy.

Finally I will make reference to that most pervasive and damaging of by-products of speeded-up and mechanized industry, namely tension. Every month men leave industry permanently damaged by exposure to too much tension for too long. Most commonly these men are precisely those which industry most values, conscientious, precise in their work, more than willing to take responsibility. Industry has a major obligation to see that means are worked out to protect these workers against the dangers to which their very virtues expose them.

We have got to learn what kinds of jobs, what kinds of industrial situations produce excessive tension, in what kinds of persons are disabling and destructive levels of tension liable to develop, what are the most effective means of preventing extreme tensional rises or of reducing them once they have appeared.

This constitutes a survey of a field which has had its origin in very recent years, which is rapidly taking form and which, like the new Mexican volcano Paricutin, appears destined for rapid though, let us hope, not explosive growth.

TREAT DISEASED BONE WITH PENICILLIN

In the future pencillin treatment of osteomyelitis, an inflammation of the bone and marrow, will eliminate in some cases the marring and mutilation resulting from surgery, according to two investigators writing in the March 30 issue of *The Journal of the American Medical Association.*

Edwin J. Grace, M.D., from the Grace Clinic, Brooklyn, and Vernon Bryson, Ph.D., from the Biological Laboratory, Cold Spring Harbor, N. Y., say that the treatment consists of hospitalizing the patient for 10 days during which injections of penicillin are administered every three hours, day and night, into the cavity which leads to the infected area of bone and into the muscles.

Certain measures must be taken, however, before this type of therapy can be employed, the authors state. The patients must have a complete physical examination with correction of any obvious deficiencies such as anemia or focal infections such as tonsillitis. Bad teeth must be extracted and cavities filled.

Of the seven chronic osteomyelitis patients who received this treatment, only one failed to respond. These patients had previously undergone a total of 91 operations without cure.

APPOINTMENTS (Continued)

western University and did post-graduate work at the School of Public Health at the University of Michigan, where the degree of Master of Public Health was conferred on him in June, 1938. Dr. Shronts completed a refresher course in the Graduate School of Public Health at Johns Hopkins University, Baltimore, Maryland, on March 8, 1946.

Among white women the death rate from tuberculosis is higher in rural areas than in urban areas. The rural rate exceeds the urban rate for all ages, except the very youngest. Jacob Yerushalmy, M.D. & Charlotte Silverman, M.D., Am. Rev. Tbc., May, 1945.

Physical Medicine Abstracts

John S. Coulter, M.D.

PRINCIPLES IN EARLY RECONSTRUCTIVE SURGERY OF SEVERE THERMAL BURNS OF THE HANDS

Byron Smith, Major, M.C., U.S. Army;
Carleton Cornell, Major, M.C., U.S. Army;
and Charles L. Neill, Major, M.C., U.S. Army
In THE BRITISH JOURNAL OF SURGERY, 33;130;159
October 1945

Post-Operative Care

The total period of splinting and post-operative elevation is five days. Dressings are washed away in an arm tub bath on the fifth day. Meticulous care and abundant saturation is required to prevent the separation of the graft from its recently acquired bed. Cocoa butter is applied to the surface of the graft and further dressings are eliminated. During the daytime while the patient is awake the graft needs no protection other than good co-operation of the patient. At night the graft is covered with a well-padded loose dressing to protect the hand from trauma during sleep. The submersion baths are resumed three times a day. Elevation is continued when the hand is at rest. The rehabilitation exercises are directed towards flexion and extension.

The ease with which the motion of adduction of the thumb to the extended fingers is performed cannot be selected as a criterion of good function. Restoration of normal function in a hand is dependent upon a wide range of motion in the interphalangeal joints. Unless the patient is specifically instructed, a tendency to substitute motion in the metacarpophalangeal joints for flexion and extension of the interphalangeal joints is outstanding. Neglect of early full motion of the interphalangeal joints is an open invitation to permanent dysfunction and deformity. Encouragement and constant attention is demanded if good functional results are expected.

Elevated healed edges around the graft at the junction with normal skin is only of temporary cosmetic concern. Spontaneous levelling of the margin and blending of the graft with normal skin occurs during rehabilitation and requires no surgical intervention. Transient cyanosis in the graft during the post-operative period is not uncommon. The appearance of a serous subepithelial bleb is an indication of excessive dependency of the extremity or activity beyond the tolerance of the graft. Elevation should be increased, activity decreased, and bullae aspirated. Occupational exercises and clay modelling are extremely effective.

A CLINICAL TEST OF NERVE REGENERATION

Captain Howard B. Shreves, Medical Corps,
Army of the United States
First Lieut. George Hawkins, Medical Corps,
Army of the United States
In THE BULLETIN OF THE U. S. ARMY MEDICAL DEPARTMENT, 5;1;110
January 1946

Following is a test useful in determining nerve regeneration relatively early following nerve suture and in differentiating between sensory recovery due to nerve overlap and recovery due to true regeneration of sutured nerves.

Blindfold the patient. Stimulate any proximal sensory area of the nerve in question with

a painful stimulus, such as a sharp pin. Have the patient indicate with his free index finger exactly the point stimulated. The patient's response will be one of three: (1) He will point quickly and accurately to the stimulated point, which is characteristic for a normal area where no sensory loss has ever occurred. (2) He will point accurately to the stimulated area with some hesitation. This is characteristic of return in overlap areas, overlap areas being those areas of sensory recovery where the cause is other than regeneration of the sutured nerve. (3) He will point to a spot away from that of the stimulation. The point where he localizes the stimulation may be anywhere from 1 cm. to 40 cm. away from the point of stimulus. This is characteristic of recovery due to true nerve regeneration.

THE TREATMENT OF COMPOUND FRACTURES OF THE FEMUR

Lt. Col. Ralph Soto-Hall and
Lt. Col. Thomas Horwitz,
Medical Corps, Army of the United States

In THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, 130;3;133
January 19, 1946

Exercise therapy of the thigh muscles should be started as soon as the wound is healed. Static exercises, such as quadriceps setting, can be done in a Thomas splint suspension or in a plaster spica. These exercises should be repeated throughout the day and should be done with considerable force in order to be efficacious. Remedial exercises should at first be given to correct the atrophy and later to produce agility, coordination and endurance. It is important to separate these two phases and to maintain in one's mind the important principle that exercise therapy must have resistance to produce power and hypertrophy, and repetition of movement to lead to endurance. Application of exercise on this basis has led to the most encouraging results that we have seen. Capt. Thomas DeLorme has applied the paraphernalia of professional weight lifters, consisting of an iron boot with attached bar bells, in order to produce resistive exercises for these femoral fractures. This has led to a remarkable increase in muscle power and in stability of the knee, with a secondary increase in joint motion. This change from the passive to active exercise offers hope for the future, when thigh muscles are seen in the injured side which may at times have a greater circumference than those of the normal thigh. Because of the ability to introduce exercise therapy so much earlier, cases which have had a successful delayed wound closure result in better function.

The early use of active exercise, with carefully supervised resistive exercise during convalescence, offers a hopeful opportunity for the improvement of knee function.

THROMBOPHLEBITIS AND PHLEBOTHROMBOSIS

Lawrence L. Hobler, M.D., F.A.C.S.,
Elmira, New York

In NEW YORK STATE JOURNAL OF MEDICINE, 46;2;179
January 15, 1946

The most important phase of treatment is in the prevention of these conditions or prophylactic treatment. It is well stated that the greatest single factor favoring thrombus formation in the lower extremity is the sudden bed confinement of a previously ambulatory older person without the benefit of exercise or the aid of gravity in the maintenance of an efficient venous circulation. The obese patient should have preoperative reduction of weight if possible. Varicose veins should be treated, if possible, in the preoperative period and in the postoperative period should have Ace number 8 bandages applied. Smoking should be reduced pre- and postoperatively. The patient's extremities, during and following surgery, should be kept warm. Some authors routinely use a heat cradle. Tight abdominal binders should not be used. Dehydration should be avoided and fluid balance well maintained. Ileus should be prevented or reduced as quickly as possible. Active motion of the legs should be instituted early. The patient should be gotten out of bed as soon as is compatible with his general condition and the surgery which has been done. The gradual reduction of the postoperative bed confinement period in recent years has markedly decreased the incidence of thrombophlebitis as well as decreasing the disability period following surgery. Fowler's position should be modified by having the legs elevated. The latter will increase the amount of flexion of the thighs on the abdomen.

Medicine and the Armed Forces

ASTP PROGRAM TERMINATED JUNE FIRST

The medical Army Specialized Training Program will be terminated by the first of June this year, according to ASF Circular 56, which is dated 6 March 1946.

Enlisted men assigned to ASTP for medical training will be disposed of as follows:

"Enlisted men assigned to ASTP for medical training who are scheduled to graduate from medical school before 1 July 1946 will not be separated from the Army regardless of age, length of service, critical score, or by virtue of having three or more children under eighteen years of age. They will not be permitted to enlist in the Regular Army. They may be separated under existing regulations pertaining to discharge of enlisted men because of undue hardship or because of importance to National health, safety, or interest. They will not be separated for any other reason except as individually authorized by the War Department."

The Circular makes the following provisions for enlisted men assigned to ASTP for medical training who are not scheduled to graduate from medical school prior to 1 July 1946:

"Those enlisted men who meet current War Department criteria for separation may be discharged. Those enlisted men who are eligible for discharge under 30 April or 30 June criteria and who do not plan to continue their medical studies may be reassigned within the service command until the date of their discharge if their services are needed. If their services are not needed, they will be discharged.

"Those enlisted men who do not meet War Department criteria for separation, who do not plan to continue their medical studies, or are not acceptible at an accredited medical school will be transferred to Brooke Army Medical Center, Fort Sam Houston, Texas.

"Those enlisted men who are not eligible for separation, who signify their intention to continue their medical studies, and are acceptable at an accredited medical school will be released from active Federal Service and transferred to the Enlisted Reserve Corps. Authority for such release will be Section I, AR 615-363, and this circular. These men will furnish a certificate from the dean or other similar official of a medical school approved by the Council of Medical Education and Hospitals of the American Medical Association."

Provision is made by the circular that these men must sign a statement requesting transfer to the Enlisted Reserve Corps and agreeing to certain conditions pertaining to termination of enrollment or requests for transfers between medical institutions.

★ ★

STREPTOMYCIN ALLOCATION PROGRAM

The Army Medical Department, which has received many requests for supplies of streptomycin to be used in treating civilian cases, has announced that all civilian inquiries and requests for this drug are to be sent to Dr. Chester S. Keefer, Evans Memorial Hospital, 65 East Newton, Boston, Massachusetts. Telephone Kenmore 9200.

Dr. Keefer is Chairman of the Committee on Chemotherapeutic and Other Agents of the Division of Medical Sciences, National Research Council, and has been authorized to handle civilian requests, providing they are submitted by a physician giving sufficient technical information to enable him to decide whether streptomycin is indicated in the treatment of the case.

Distribution of limited supplies of streptomycin to civilians through the Committee on Chemotherapeutic and Other Agents of the Division of Medical Sciences, National Research Council, has been provided for in the allocation program recently established by the Civilian Production Administration. Other agencies receiving allotments of the scarce drug include the Army, Navy, Veterans Administration, and the United States Public Health Service.

Although there has been a general misconception that the Army controls the total streptomycin supply, actually an approximate thirty per cent will be allotted to the Army from the production for the month of March. The bulk of the limited supply received by the Army has been employed in treating urinary tract infections associated with spinal cord injuries, and a few serious infections which have proved resistant to penicillin. At no time has the allotment been adequate to premit any extensive research, such as experimental work on the treating of tuberculosis. In order that Dr. Keefer may obtain an adequate supply for civilian appeals, the Army has voluntarily agreed

to a delay in its March delivery of streptomycin from producers.

Grants-in-aid of approximately $500,000 for the clinical study of streptomycin, contributed in equal shares to the National Research Council by eleven pharmaceutical manufacturers, has already been announced by the Chemical Division of the Civilian Production Administration. The participating firms constitute the Streptomycin Producers Advisory Committee of the CPA.

Dr. Keefer, who headed the clinical investigation of penicillin, will be in charge of the similar program on streptomycin and will submit recommendations, together with a report on the results. The CPA has announced that there will be no commercial distribution of streptomycin at this time, nor will the producers supply the drug directly for civilian requests. Physicians have been asked not to submit requests for streptomycin if the cases are susceptible to the action of the sulfonamides, penicillin and other therapeutic agents.

The production of streptomycin, which was approximately 3,000 grams last September, is expected to increase to nearly 27,000 grams by March. A companion drug to penicillin, streptomycin is produced in a similar manner, by fermentation and chemical extraction, and, like penicillin, requires carefully controlled conditions of temperature, air and sterility. It is expected to prove a valuable supplement in cases where infections do not respond to penicillin treatment, but studies have not yet advanced to the point where the methods of administration or the amenable diseases are definitely known.

★ ★

ARMY PROGRAM PREVENTS IMPORTING OF DISEASE

There is little or no risk of introducing foreign disease into the United States through returning military personnel from abroad, according to an announcement by the Office of The Surgeon General, which pointed out that the most careful estimates anticipate only moderate danger in a few cases.

This conclusion was reached after a world-wide survey by the Interdepartmental Quarantine Commission, which was jointly established by the Secretaries of War and Navy and the Administrator of the Federal Security Administration to study this problem.

With the end of the war and return of the bulk of combat forces, it is now possible to review actual results on a preliminary basis. Though tentative, highly optimistic conclusions appear warranted, the announcement stated.

To date no acute outbreak or secondary spread of an imported disease has been reported. While more slowly evident diseases may be identified later, it should be remembered that the traffic of war has gone on for four years, giving ample time for discovery of such diseases.

The 440,000 hospitalizations for malaria reported among Army personnel during the war fall short of pessimistic predictions for what has proved to be the commonest infectious disease of troops abroad.

Even with the consideration that a portion of infected persons are liable to recurrence after their return to the States, conditions in this country are generally unfavorable for the spread of malaria and the chances of community risk are very small.

The special danger of cholera, smallpox, plague, epidemic typhus, and yellow fever is a matter of historical record. Immunizations were employed against all these diseases by the Armed Forces along with water purification, environmental sanitation, and disinfestation and insect control. This preventive medicine program was exercised even under combat conditions and its effectiveness was shown by Army records. The high general level of sanitation, insect control, and alert medical care available here forms the final link in the protection of this country from imported diseases.

The risk of importing disease from abroad has been less in some respects than in normal prewar traffic and the credit for these results has been attributed to the modern preventive medicine program of the Army and Navy.

Case of exotic disease did occur, the announcement stated, but extensive investigation of likely hazards and critical application of preventive and corrective measures were effective in reducing risks to small proportions.

★ ★

HOSPITALIZED VETERANS OFFERED INSTITUTE COURSES

Arrangements to provide educational opportunities through the U.S.A.F.I. for personnel in veterans' hospitals has been announced by the War Department.

Some ninety-odd correspondence and self-teaching courses prepared by the U.S.A.F.I. will be made available to hospitalized veterans in accordance with arrangements made with the Veterans' Administration. The courses will be followed up by corresponding end-of-course tests such as are regularly given to personnel on active duty.

The Veterans' Administration has planned that lessons and tests submitted will be graded by the University of Wisconsin, which now grades lessons submitted by military personnel. Registration of courses, grading of tests and the recording of course completions for possible accreditation purposes will be the complete responsibility of the Medical Rehabilitation Service of the Veterans' Administration. The Army supplies at one time bulk shipments to named veterans' hospitals.

Generally, personnel in veterans' hospitals have been unable to participate in educational programs. Such personnel could not enroll for services of the United States Armed Forces Institute. (U.S.A.F.I. services are limited to military personnel on active duty. Veterans who had enrolled for courses prior to discharge may, under circumstances, complete such courses.) On the other hand, veterans could not take advantage of educational programs provided for them until they had

been separated from the veterans' hospitals. Therefore, this new arrangement is limited to hospitalized veterans.

★ ★

AWARDS AND COMMENDATIONS

The Legion of Merit was recently presented to Capt. Francis J. Braceland for "wartime services to the Bureau of Medicine and Surgery." The citation accompanying the award specified "exceptionally meritorious conduct in the performance of outstanding services to the government of the United States as special assistant in psychiatry to the Surgeon General of the Navy and later as chief of the division of neuropsychiatry, Bureau of Medicine and Surgery, from January 1942 to October 1945. Possessing an international reputation in the field of psychiatry, Captain Braceland was responsible for the procurement and training of medical officers and enlisted personnel to adequately establish psychiatric services to all naval hospitals in the United States and the advanced bases. His medical knowledge and ability contributed immeasurably to the welfare of the Naval Medical Corps during these critical years." Dr. Braceland graduated from Jefferson Medical College of Phildelphia in 1930 and entered the service in June 1942.

The Bronze Star was recently awarded to Capt. Richard G. Fort, Evanston, Ill., for his work from July 14 to Aug. 25, 1944. According to the citation accompanying the award, "Captain Fort enabled his medical battalion to provide efficient medical service for the sick and wounded of the division, maintaining superior liaison of widely separated subordinate units. Captain Fort often traveled far in advance of the medical battalion to reconnoiter sites for installations, necessitating long rides day and night under trying conditions. His profound knowledge of medical battalion functions and his efficient performance of duties reflect great credit on himself and on the medical corps." Dr. Fort graduated from the University of Illinois College of Medicine, Chicago, in 1939 and entered the service March 31, 1941.

Capt. Carl E. Billings, Barrington, Ill., was recently awarded the Bronze Star for meritorious service performed in combat operations against the enemy in Belgium and Germany during the first part of the year 1945. Captain Billings' services resulted in the saving of many lives which otherwise would have been lost. Dr. Billings graduated from the University of Chicago School of Medicine in 1942 and entered the service July 1, 1943.



DISABLED VETERANS TO TRAIN FOR SKILLED JOBS

Dr. Paul R. Hawley, chief medical director of the Veterans Administration, recently announced the first industrial agreement to train severely disabled veterans in Veterans Administration hospitals for skilled and semiskilled jobs. The Bulova School of Watchmaking, Woodside, L. I., N. Y., will conduct the program under arrangements negotiated by Dr. Donald A. Covalt, acting assistant director of Veterans Administration Medical Rehabilitation, and Stanley Simon, trustee of the Bulova school.

"Severely disabled veterans who have a special aptitude for precision work will be given an opportunity for this training," Dr. Hawley stated. The training course will be tailored to each patient's individual work tolerance, Dr. Covalt said. He added that a veteran may work only an hour a day if that is all the time he can spend at the training without endangering his health.

Although there is no set time for the handicapped veteran to complete the course, Veterans Administration officials said it probably would take about a year; if the veteran does not complete his training while still in a Veterans Administration hospital, he can go to the Bulova School of Watchmaking on Long Island.

The work will be conducted principally in the seven paraplegic or spinal cord injury centers which the Veterans Administration is in the process of setting up or taking over from the Army. However, other severely handicapped veterans will participate in the program.

Approximately 400 paraplegics are in Veterans Administration hospitals at present, but some 1,600 more who are now in army and navy hospitals will be transferred to the Veterans Administration in the near future. The seven centers include five operated by the armed services that will be taken over intact and two Veterans Administration hospitals which have specific facilities for such patients.

These paraplegic centers will be in Framingham, Mass.; New York City (Bronx Veterans Administration Hospital); Richmond, Va.; Memphis, Tenn.; Pittsburgh (Aspinwall Veterans Administration hospital): Chicago, and Los Angeles.

News of the State

PERSONALS · COMING EVENTS · MARRIAGES · DEATHS

ADAMS COUNTY

Alfred S. Ash has opened offices in Mendon for the practice of medicine.

BUREAU COUNTY

The members of the Bureau County Medical Society and the Auxiliary held a dinner meeting at St. Margaret's hospital Wednesday March 21st. Following the dinner, the doctors heard an interesting talk on Plastic Surgery by Dr. Lauten of Aurora. The Auxiliary held a business meeting. A joint meeting with the lawyers of Bureau County was held in April.

CHAMPAIGN COUNTY

Lloyd F. Kaiser, formerly of Rhinelander, Wisconsin, has become associated with Clarence S. Bucher in the Bucher clinic in Champaign.

W. E. Schowengerdt, elderly Champaign physician has announced his retirement from the Champaign board of education in May, 1947. He will have served 31-½ years at that time.

Leo L. Roseman has opened an office in Champaign for the practice of medicine having been discharged from active duty after serving three and a half years in the medical corp.

CHRISTIAN COUNTY

G. A. Tankersley who has practiced medicine in Christian county for the past 38 years has sold his practice to James I. Lynch, physician and surgeon, of Peru, and will retire. Dr. Tankersley will remain in the office with Dr. Lynch for a month or more to introduce him to his patients and friends in Taylorville.

CLINTON COUNTY

The Clinton County Medical Society held its regular meeting on March 21st. Dr. C. F. Sherwin of the Medical Faculty of St. Louis University, discussed "Skin and Cancer."

COLES COUNTY

Capt. G. E. Seymour expects to open an office in Mattoon soon for the practice of medicine.

COOK COUNTY

The 31st annual convention of the American Association of Industrial Physicians and Surgeons was held April 8 to 13. "Full Health for the 50,000,000 Men and Women in Industry" was the theme of the meeting.

The Third Walter Wile Hamburger Memorial Lecture will be delivered on Friday evening, May 24, at the Palmer House by Samuel A. Levine, Assistant Professor of Medicine, Harvard Medical School, on "The Treatment of Congestive Heart Failure."

Meyer J. Steinberg has been named chief of medical services at the Regional-Station hospital at Fort Sheridan.

Donald Miller was a guest of the Covenant Young Women's auxiliary in Austin March 23rd and gave an illustrated lecture. He showed his personal movies of the European war, including 200 feet taken in the infamous Dachau prison camp.

John R. Boyd spoke at the Y's Men's club March 14 relating his experiences as a naval medical officer in the South Pacific theatre.

Announcement was made of the appointment of Delmar Goode of Downey as deputy chief medical director of the Veterans Administration branch office in Chicago. Dr. Goode will supervise VA medical services in Illinois, Indiana and Wisconsin.

Harold C. Lueth, associate professor of medicine at the University of Illinois Medical School has been appointed dean of the University of Nebraska Medical School at Omaha.

At the annual meeting of the Chicago Dermatological Society held January 16th the following officers were elected: Marcus R. Caro, President; Carl W. Laymon, (Minneapolis), Vice-President; and Leonard F. Weber, Secretary-Treasurer.

Bernard J. Skorodin was invited to address the Parent Teacher Association of the Roosevelt School, Park Ridge, on March 25th.

Eugene T. McEnery addressed the students and teachers of the Penn School of Chicago on April 11th.

Chauncey C. Maher addressed the DuPage County Medical Society on March 20th.

Chester Guy was invited to address the Kane County Medical Society on April 10. He discussed "Post Cholecystectomy Syndrome."

Herbert E. Schmitz, Simon L. Wolters, Charles Galloway and Abraham Lash gave a post-graduate program on obstetrics and gynecology for doctors of Southern Illinois at East St. Louis on April 4th.

Paul R. Cannon spoke on "Recent Advances in the Problem of Protein Metabolism" before the Winnebago County Medical Society on April 9.

Douglas Buchanan was invited to address the McLean County Medical Society on "Common Neurological Problems as Seen in General Practice" at the April 9th meeting.

Charles H. Phifer and John W. Neal have been invited to give a program on "Prepayment Medical Care Plans" and the "Wagner-Murray Dingell Bill" before the DuPage County Medical Society on April 17th.

Willard O. Thompson was invited to speak on "Extending the Benefits of Medical Care" before the business and Professional Women's Division of the Illinois League of Women Voters, Chicago, on April 12th.

The Educational Committee of the Illinois State Medical Society received many requests for doctors to address upper-grade and high school assemblies in connection with CHICAGO YOUTH WEEK, May 13-17. Miss Jean McArthur, Secretary, wishes to thank the doctors for their splendid co-operation.

H. Necheles was invited to present the scientific program at the April 25th joint meeting of Lee and Whiteside County Medical Societies at Sterling. He presented "A Critical Review of Gastro-Intestinal Therapy."

The Post-Graduate Committee of the Illinois State Medical Society sponsored a Conference at Benton, Illinois, on April 25th, for physicians of southern Illinois. Chicago speakers who took part in the all-day conference were Ralph A. Reis, Arkell M. Vaughn, Harry Leichenger, Warren H. Cole, George Hellmuth, Herbert Rattner.

Fred L. Drennan was invited to give a paper on "Peptic Ulcers of the Stomach and Duodenum with Suggestions as to Treatment" on May 3 before the Will-Grundy County Medical Society.

Oscar Hawkinson accepted an invitation to talk on government control of medicine before the State Welfare Chairmen of the Illinois League for Women Voters on April 26th.

Carl F. Steinhoff gave a talk on "Training for Health" to the 400 upper classmen of the Motley Elementary School on April 26th.

JO DAVIESS COUNTY

Ralph E. Speer formerly of Chicago has opened an office in Mount Carroll for the practice of medicine.

DE KALB COUNTY

The De Kalb County Medical Society held a joint meeting with the De Kalb County Tuberculosis Association on April 4th. George C. Turner of the Municipal Tuberculosis Sanatorium of Chicago spoke on the subject "Treatment of Tuberculosis."

DU PAGE COUNTY

On April 1st a new clinic will begin operation in Elmhurst, to be known as the Elmhurst Clinic. Clinic members are E. H. Droegemueller, C. O. Evanson, E. F. Neckermann, E. S. Watson and Marie H. Wittler. Associated with the clinic will be Bruce A. Hollister.

FAYETTE COUNTY

C. H. Moore of Vandalia celebrated his fiftieth year in the practice of medicine on March 19th. He was the honored guest at a banquet given that evening at which time Dr. Mark Greer gave a short address and presented Dr. Moore a certificate of honor from the Illinois Medical Society and a button indicating membership in the Illinois Medical Society's Fifty Year club.

HENRY COUNTY

C. G. Kurtz has opened an office and is resuming the practice of medicine in Kewanee after several years of service in the army medical corps.

A. W. Wellstein recently returned to Geneseo after serving in the armed forces and expects to reopen his office soon.

W. F. Spencer of Geneseo celebrated his 82nd birthday anniversary March 8th. Dr. Spencer is one of the oldest practicing physicians in the state.

JEFFERSON-HAMILTON COUNTIES

The Jefferson-Hamilton County Medical Society held its March meeting at the Good Samaritan Hospital. Gilbert H. Edwards of Pinckneyville who was a World War II flight surgeon was the speaker.

KANE COUNTY

D. L. Steinberg of Chicago has been appointed acting superintendent of the Elgin State hospital.

LAKE COUNTY

The following Lake County doctors have been released from service and have resumed the practice of medicine in the county: A. N. Berke, George Buttemiller, J. Frederick Lutz and Owen G. McDonald.

LA SALLE COUNTY

The fourth annual industrial health program sponsored by the La Salle County Medical Society and the Illinois Valley Manufacturers Club in cooperation with the division of industrial hygiene of the state department of public health was held on April 11th in La Salle. One of the speakers was Victor G. Heiser, medical consultant of the National Association of Manufacturers, New York City, who discussed "Industrial Medicine in the Postwar Industry."

LIVINGSTON COUNTY

At a dinner meeting held in March by the Livingston County Medical Society, Dr. W. W. Webb, Assistant Professor of Otolaryngology, University of Iowa, spoke on "The Practical Consideration of Vertigo."

LOGAN COUNTY

On March 28 members of the Auxiliary to Logan County Medical Society met for a dinner meeting. Dr. Donald Barringer gave a report from Hygeia.

Donald Barringer has resumed his practice in Lincoln after taking a post-graduate course in Memphis, Tenn.

MC LEAN COUNTY

The regular meeting of the McLean County Medical Society was held April 9th. Dr. Douglas Buchanan spoke on "Common Neurological Problems as Seen In General Practice."

MACON COUNTY

The Macon County Medical Society held a meeting on March 19. Dr. Hugh McCullough discussed "Early Diagnosis of Rheumatic Fever and Other Forms of Heart Disease."

MADISON COUNTY

The physicians of Wood River township held a meeting to revive and reorganize the Wood River Township Medical Society. L. L. Baker was elected president; W. V. Roberson, vice-president; and W. J. Reuter, secretary.

MASSAC COUNTY

W. A. Gray has returned to Metropolis and expects to resume the practice of medicine soon.

MARION COUNTY

Charles Pope Marshall, Centralia, rejected 60 years ago as a bad insurance risk, celebrated his 90th anniversary on March 17th.

MERCER COUNTY

L. E. Robinson, Aledo, was elected president of the Mercer County Medical Society at its annual meeting held in April. W. A. Miller was named vice-president; and V. A. McClanahan, secretary.

MONTGOMERY COUNTY

R. E. Mulrooney has returned to Litchfield to resume the practice of medicine.

MORGAN COUNTY

C. W. Johnston has resumed the practice of medicine in Waverly.

OGLE COUNTY

Robert M. Caty has opened an office for the practice of medicine in Oregon.

PEORIA COUNTY

PEORIA MEDICAL SOCIETY AND THE ILLINOIS HEART ASSOCIATION

The advent of spring means many things to many people, to most of us who were fortunate enough to be present at the joint meeting of the Illinois Heart Association and the Peoria Medical Society on March 21, it was significant chiefly because of two outstanding features.

First, the excellence of the program, and, secondly, the large attendance of physicians including many who had returned to civilian life or who were just about to do so.

The afternoon session included the following:

Recognition and Treatment of Rheumatic Heart Disease in Children, Dr. John Vonachen, Peoria; Digitalis Therapy, Dr. James Sours, Peoria; The Modern Therapy of Subacute Bacterial Endocarditis, Dr. Edward Cannady, East St. Louis; Indication and Limitations of the Electrocardiogram, Dr. George Parker, Peoria; The Status of X-Ray in Cardiac Diagnosis, Dr. Paul Dirkse, Peoria; Auscultation of the Heart, Dr. Harry Durkin, Peoria; The Pathology of Aortic Aneurism, Dr. John Kraus, Peoria; Experience with Rheumatic Fever in an Army Hospital, Dr. Harry Warren, Peoria.

Following the dinner Dr. N. C. Gilbert was asked to give the evening address.

His subject, "Conditions Influencing Heart Disease" wove together the newest and latest in scientific research with some of the homier patterns in the treatment of the patient with heart disease.

Dr. Gilbert's words made the purposes of the Illinois Heart Association "to stimulate interest and encourage investigation in the social, medical, industrial and economic problems connected with heart disease, to develop cardiac clinics and other facilities for the diagnosis and treatment of heart disease, and to correlate and standardize the work of various agencies interested in the prevention and relief of heart disease throughout the State of Illinois and sponsor local societies," take on new and forceful meaning.

A sincere word of appreciation and commendation is due all the speakers and especially to those whose responsibility it was to take care of the endless details in arranging the day's program, the President and Secretary of the Peoria Medical Society, Dr. Clarence Magaret and Dr. W. E. Owen, and Dr. Harry Durkin, President of the Illinois Heart Association.

Thirty counties in the state were represented by approximately 200 physicians who attended the afternoon program. 120 attended the dinner with an additional 40 coming in for the evening session.

Running simultaneously with the physicians' meeting was a dinner and meeting of the Woman's Auxiliary. Mrs. W. E. Owen, chairman, assisted by the co-hostesses, Mrs. Robert Sutton and Mrs. Garnett Freye, planned a special program following a most delightful dinner.

A number of additional guests from various health, welfare and civic groups, including the Junior League, the American Red Cross, the social workers, the hospitals, the public health nurses and women's clubs, were invited to hear Mrs. Ruth McEldowney, Executive Secretary of the Illinois Heart Association, speak on the work of a heart association.

In addition to relating some of the functions and activities of a heart association, a sound film "Jimmy Beats Rheumatic Fever" was shown. (Communication)

The following Peoria doctors have returned from military service and resumed the practice of medicine: Charles Branch, R. D. Hart, Lawrence Litterst, C. F. Neuhoff, Harold T. Lawler.

Arthur Sprenger and Harry J. Ireland have announced their association in the practice of urology.

E. V. Thiehoff, commissioner of health in Peoria, addressed the women's auxiliary to the Peoria Medical Society on March 26th. He discussed "The Public Health Program in Peoria."

ROCK ISLAND COUNTY

S. C. Costigan, Moline, was a guest speaker at the meeting of the Zonta Club on March 26th. He spoke on the customs, habits and industries of Iran, having spent 25 months there during the war.

The Moline Physicians' club elected C. C. Costigan president at a meeting held March 15th. J. J. Cenedella was elected vice president; Kurt P. Froelich, secretary and Mabel H. Otis, treasurer.

The following Rock Island County doctors have resumed the practice of medicine: G. D. Cunningham, H. M. Menton, L. W. Freeman, S. C. Kaim and Francis Cenedella.

H. M. Gibson of Moline has been elected president of the Moline public hospital medical staff. Other officers elected were: vice-president, R. D. Perkins; secretary-treasurer, L. J. McCormick.

The April meeting of the Rock Island County Medical Society was held at the Lutheran Hospital, Moline. Dr. James Allen, Professor of Ophthalmology, University of Iowa, discussed "Recent Developments in Ophthalmology.

ST. CLAIR COUNTY

George R. Hays, Marissa, and Fred Rose, Millstadt, both practicing physicians for the past 50 years were honored by the Belleville branch of the St. Clair County Medical Society April 3rd. Dr. Andy Hall was present to accept the doctors

as new members to the Illinois State Medical Society's Fifty-Year Club.

A special conference to study the latest in obstetrics and gynecology was held at East St. Louis on April 4th. Doctors of southern Illinois were invited to attend the afternoon and evening sessions.

SANGAMON COUNTY

Raymond V. Brokaw who has been superintendent of the division of cancer control in the state health department has resigned.

STEPHENSON COUNTY

An iron lung for use in treatment of poliomyelitis was presented to the Stephenson County Medical Society by the Moose lodge at Freeport.

TAZEWELL COUNTY

R. F. K. Jordan has returned to Pekin to spend his terminal leave after 43 months of service.

Nelson A. Wright, Jr. has returned to Pekin and resumed the practice of medicine.

VERMILION COUNTY

Paul Hepner of Danville was the guest speaker at the Kiwanis Club meeting on March 28th. He outlined experiences encountered while serving with the Marines at Nagasaki, Japan, and Okinawa.

WASHINGTON COUNTY

Herman Schmidt of Okawville was presented with a gold pin and a certificate of membership in the Fifty-Year Club by Dr. Andy Hall at a meeting held March 19th.

WILLIAMSON COUNTY

A. N. Baker has resumed the practice of medicine in Marion after completion of the remodeling of his office.

WINNEBAGO COUNTY

The following doctors have resumed the practice of medicine in Rockford: Arvid T. Johnson, Gordon Burns, Joseph Rheingold and J. T. Rankin.

During April the Winnebago County Medical Society conducted its annual immunization drive to immunize all Winnebago county children against smallpox and diphtheria.

At the April meeting of the Winnebago County Medical Society Dr. P. R. Cannon of the University of Chicago discussed "Recent Advances in the Problem of Protein Metabolism."

DEATHS

Frank M. Anderson, Decatur. Medical College of Ohio, 1882. Had been a practicing physician and surgeon for 64 years, practicing in Decatur 47 years. In 1932 he was honored by the Macon County Medical Society for 50 years of active practice. Past president of the County Medical Society. Died April 3rd. Age 85.

Louis Balcke, Pekin. Chicago Coll. of Med. and Surgery, 1915. Died March 3rd. Age 41.

Frank L. Barthelme, Effingham. St. Louis University School of Medicine. Served with the Army Medical Corps during World War II. Died March 9th. Age 48.

Wm. J. Blackard, Harrisburg. Washington University School of Medicine, St. Louis, 1908. Former Gallatin county superintendent of schools. Practiced medicine in Harrisburg 39 years. Died March 17th. Age 75.

Arthur Goltz, Grafton. National University of Arts and Science Med. Dept., St. Louis, 1914. Died March 8th. Age 57.

L. M. Griffin, Polo. Hahnemann Medical College, Chicago, 1908. Practicing physician for 35 years in Polo. Died March 20th. Age 63.

Joseph A. Hirsch, Edwardsville. Homeo. Med. Coll. of Missouri, St. Louis, 1899. Killed in automobile crash March 28th. Age 73.

Carl A. Ostling, Chicago. Rush Medical College, 1904. Died April 5th. Age 78.

Charles O. Reinhardt, Mascoutah. Loyola University School of Medicine, Chicago, 1936. Died March 19th. Age 36.

E. M. Smith, Mt. Vernon. Medical College of Indiana, Indianapolis. Received the Fifty Year Club membership in 1939. Member of the International Congress of Radiology. Died March 7, 1946. Age 77.

Martin Van Raalte, St. Louis. Washington University, School of Medicine, St. Louis, 1912. Died December 5th, 1945. Age 57.

Bert L. T. Woods, Chicago. University of Illinois College of Medicine, 1906. Formerly an associate professor of anatomy at the university. Died March 21. Age 64.

George A. Wiggins, Milan. Medico-Chirurgical Coll. of Philadelphia, 1886. Practicing physician fifty-eight years in Milan. Member of the Fifty Year Club. Died March 9th. Age 84.

Sanford E. Winget, Bloomington. Barnes Medical College, St. Louis, 1898. Died March 18th. Age 69.

The Light that Never Fails!



"Emergency Case!"

While the city sleeps, lights blaze in a hospital ward—they mean "Doctors at Work!"

He isn't interested in making speeches and taking bows on the magnificent job he does. He's just interested in doing that job with all the skill and selfless devotion he possesses.

His battle knows no lulls. But he asks no quarter. All this he knew—and accepted—when those proud letters "M.D." were first affixed to his name.



R. J. Reynolds Tobacco Co., Winston-Salem, N. C.

According to a recent independent nationwide survey:

MORE DOCTORS SMOKE CAMELS

than any other cigarette

Stimulation OF THE ENTIRE TRACT...VALUABLE IN OVERCOMING HABITUAL CONSTIPATION

In the true correction of habitual constipation, more than colonic stimulation is required. Activation of the entire intestinal tract is needed to overcome stasis in all segments and as an aid in functional re-education. The dual action of Cholmodin is intended to meet this need. Containing extract of aloes (¾ gr.) and deoxycholic acid (1½ gr.), Cholmodin produces stimulation of the entire tract in a manner closely resembling the normal. Deoxycholic acid, a normal constituent of human bile, provides direct stimulation of the small intestine. Emodin, under the influence of deoxycholic acid, released from aloes promptly and in a sustained manner, provides gentle yet effective stimulation of the colon. By means of this combined influence, Cholmodin activates the *entire* tract, producing formed, non-watery stools with no associated abdominal discomfort. Cholmodin is especially valuable in atonic constipation encountered in the aged, in bedridden patients, and as an occasional cathartic. Recommended dosage: for habitual constipation, 1 to 2 tablets 2 to 3 times daily; as an occasional laxant, 2 tablets on retiring.

Available in boxes of 50 sanitaped tablets.

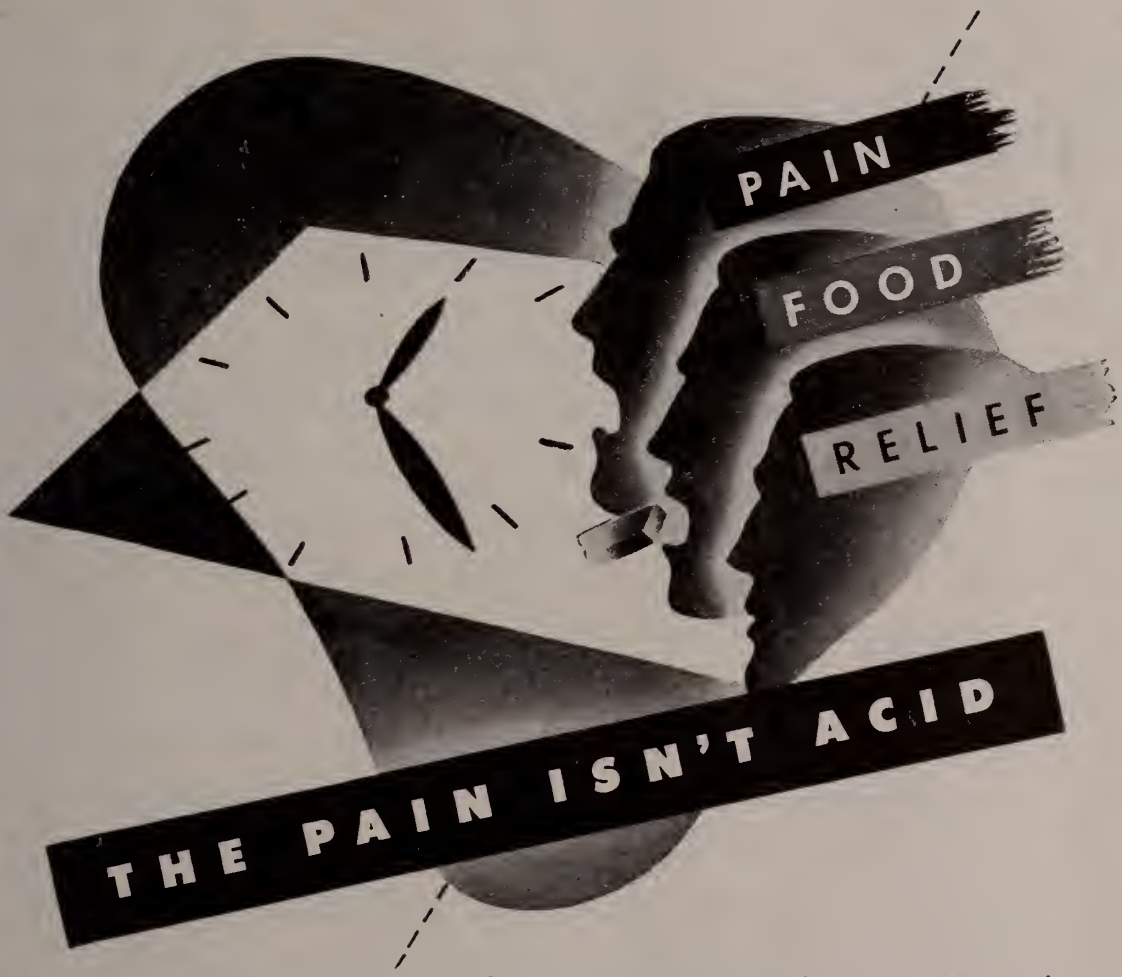
Cholmodin

REG. U. S. PAT. OFF.

Riedel-de Haen

DIVISION OF AMES COMPANY, INC.

NEW YORK 13, N. Y.



Pain in peptic ulcer results from increased gastric tension and irritable bowel and not from hyper-acidity[1]. In fact, the peptic ulcer patient in many cases does not secrete more acid or gastric juice than normal human beings[2]. The damage is done by retention of acid or gastric juice because of improper emptying time of the stomach. Whatever the etiology, however, acid irritates the lesion.

Treatment, then, should be directed toward non-systemic neutralization but more important the relief of the symptoms of irritable bowel and pylorospasm. BICALCE affords a rational management, combining in powder form Aluminum Hydroxide, Bismuth and Calcium salts with VEGETABLE MUCILAGE (Gel). Excellent and gratifying results have been reported with vegetable mucilage in controlling irritable bowel and the associated distress of peptic ulcer.



BICALCE is now available in individual dose envelopes, permitting accurate dosage and ease in administration. Packaged in prescription cartons of 21 envelopes each. Literature on request.

Bicalce

1. Paul & Rhomberg, J. Iowa S. M. A., 35:167, 1945
2. Sandweiss, et al, J. A. M. A., *130*:261, 1946

IRWIN, NEISLER & CO. 60th ANNIVERSARY Irwin Neisler **DECATUR, ILLINOIS**

PROTEIN

and the Dietary of Kidney Disease

The fundamental concept, that nutritional requirements must be met in disease as well as in health, holds especially true in renal disease.[1] Because many affections of the kidney involve excretion of blood albumin via the urine, the intake of protein in former years was curtailed in a futile attempt to stem the loss of protein.

Modern nutritional science has emphasized the necessity for maintaining nitrogen balance even in the face of the severe albuminuria characteristic of lipid nephrosis.[2] Not only must the basic nitrogen requirements of the organism be met, but the urinary loss must be compensated for as well.[3] Only when this adjustment of protein intake is made can the plasma albumin be restored to normal levels and the associated edema overcome.

Meat is an excellent source of protein in the management of nephritis and nephrosis, not only because of the high percentage of protein contained, but especially because its protein is of highest biologic quality, applicable for every protein need.

---

1 *Stare, F. J., and Thorn, G. W.: Protein Nutrition in Problems of Medical Interest, J.A.M.A. 127:1120 (April 28) 1945.*

2 *Stare, F. J., and Davidson, C. S.: Protein: Its Role in Human Nutrition; Introduction, J.A.M.A. 127:985 (April 14) 1945.*

3 *Anderson, G. K.: The Importance of Protein in Diet Therapy, J.Am.Dietet.A. 21:436 (July-August) 1945.*

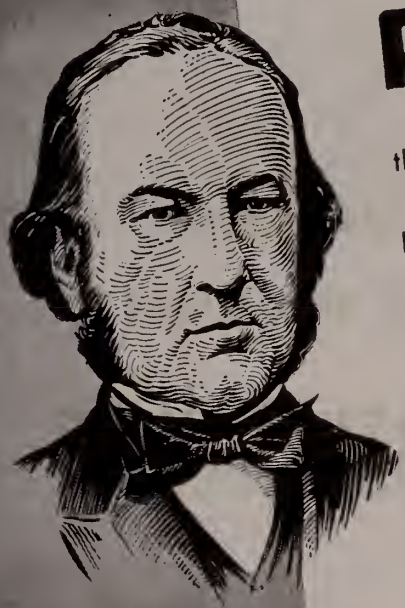
The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods and Nutrition

AMERICAN MEAT INSTITUTE

MAIN OFFICE, CHICAGO . . . MEMBERS THROUGHOUT THE UNITED STATES

MASTER BUILDERS of ENDOCRINOLOGY



CLAUDE BERNARD
(1813-1878)

Claude Bernard has been rightly called the founder of experimental medicine. His work is associated with three great problems —pancreatic secretion, glycogen, and vasomotor nerves.

His work on the pancreas, and his studies on blood sugar and the glycogenic function of the liver, form the basis for our present knowledge of pancreatic function.

Aware of our responsibility to maintain the standards set by the early investigators, Harrower is dedicated to the task of developing superior products that physicians may continue to prescribe with confidence.

We adhere to high scientific and technical standards in the manufacture, assay, and control of Harrower endocrine and pharmaceutical products.

THE HARROWER LABORATORY · at Your Service · GLENDALE CALIFORNIA

The HARROWER LABORATORY, Inc.
Glendale 5, California
Dallas 1
Chicago 1
New York 7



BOTH THE PHYSICIAN
AND PATIENT APPRECIATE...

the unique combination of advantages in

MANDELAMINE

Reg. U. S. Pat. Off.
(Methenamine Mandelate)

- **PROMPT, EFFECTIVE ACTION**
  Disturbing urinary symptoms are usually alleviated within three to five days.
- **SAFETY**
  Virtual lack of toxicity facilitates therapy and eliminates need for selection of patients.
- **CONVENIENCE OF THERAPY**
  Supplementary acidification, restriction of fluid intake, dietary control, or other special measures are unnecessary.
- **WIDE RANGE OF THERAPEUTIC ACTIVITY**
  Remarkably efficient in the treatment of pyelonephritis, cystitis, prostatitis, and infections accompanying renal calculi or neurogenic bladder.

Mandelamine is supplied in enteric coated tablets of 0.25 Gm. (3¾ grains) each, in packages of 120 tablets sanitaped, and in bottles of 500 and 1000.



NEPERA CHEMICAL CO. INC.
21 Gray Oaks Ave.
Yonkers 2, New York
Please send me literature, and a physician's sample of Mandelamine.

Name.....M.D.

Street.....

City.....State.....

NEPERA CHEMICAL CO. INC.

Manufacturing Chemists Nepera Chemicals **Yonkers 2, New York**



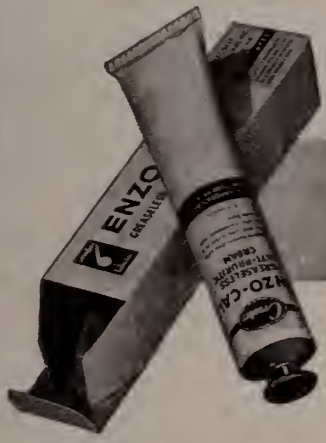
"for this relief... much thanks"

—Hamlet

Patients echo these words of Shakespeare when the physician provides prompt, effective control of itching. With the coming of Summer . . . exposure to sun, wind, insects, and poison ivy . . . his services in this complaint will be doubly in demand.

And they will be doubly effective, too, if ENZO-CAL is prescribed, for this pleasing, *greaseless* cream provides not only immediate relief, but long-lasting comfort. ENZO-CAL contains benzocaine which produces a mild local anesthesia of the affected areas, *plus* semi-colloidal calamine and zinc oxide which remain as a soothing, healing, protective film on the skin.

For sunburn, windburn, insect bites, poison ivy, chafing, heat rashes and other summer complaints, prescribe



Enzo-CAL

for ITCHING

Available in 2 oz. tubes and 1 lb. jars at all pharmacies.

CROOKES Laboratories

305 East 45th Street
New York 17, N. Y.

YOU CAN'T OVERRATE THE VALUE OF CONTROL



When you come to think of it, it's surprising how much control means. In various forms it adds enjoyment to sports—security to daily routine—satisfaction to work of skill.

And as *quality control* it assures safety in medicines. This is particularly well demonstrated in the development and production of U.D. pharmaceuticals. For throughout modern U.D. laboratories and plants a carefully conceived and remarkably efficient system of tests and checks results in products with an enviable reputation for consistent excellence.

Credit for maintenance of these high standards rests with a body of doctors, chemists and pharmacists, known as the Formula Control Committee. As the ultimate precaution, this group personally checks every finished product.

Such professional attention insures that your prescriptions are filled with finest ingredients when you specify U.D. pharmaceuticals. Your neighborhood Rexall Drug Store offers this service—together with complete facilities for meeting your patients' needs reliably and economically.

UNITED-REXALL DRUG CO.

Rexall DRUGS

U.D. products are available wherever you see this sign

PHARMACEUTICAL CHEMISTS FOR MORE THAN 43 YEARS

Los Angeles • Boston • St. Louis • Chicago • Atlanta • San Francisco
Portland • Pittsburgh • Ft. Worth • Nottingham • Toronto • So. Africa

UNITED-REXALL DRUG COMPANY AND YOUR REXALL DRUGGIST • *Your Partners in Health Service*



ADHERENCE TO A STANDARD

There are few more important activities than the production of medicaments for the relief of human ills—and none wherein the implications of responsibility are more profound.

Mass production on the grand scale is not necessarily an assurance of clinical efficacy. Doing a few things superlatively well provides products which merit deserved confidence.

Favored with an environment almost ideal for the important work being performed; guided by a staff of forward-thinking scientists; operated by personnel whose undiverted interest occupies each day, U. S. Standard Products Company are producing a selected and therapeutically efficient list of distinguished essentials for the medical profession.

OUTSTANDING U. S. STANDARD BIOLOGICALS:

DIPHTHERIA TOXOID

•

TETANUS ANTITOXIN

•

SMALL POX VACCINE

•

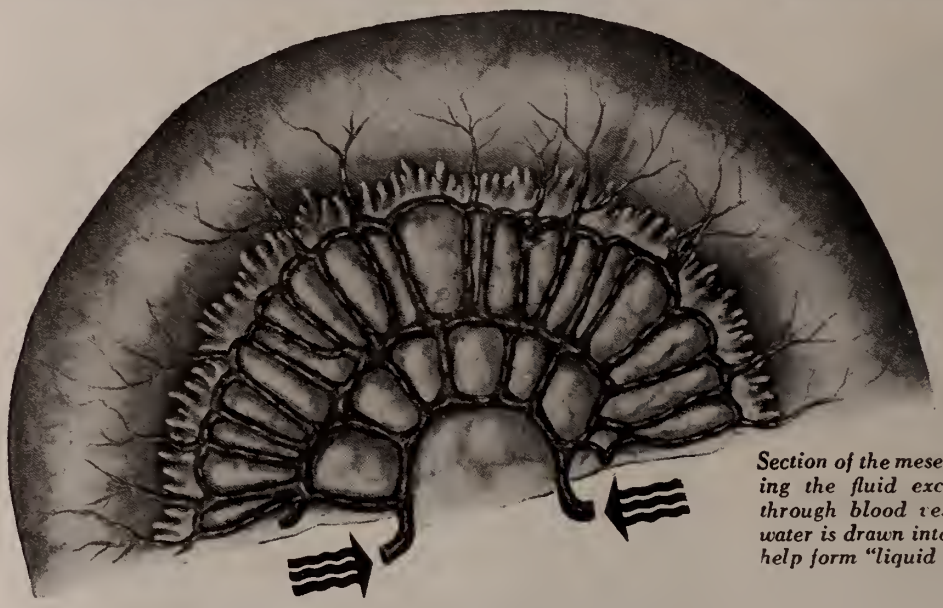
TYPHOID VACCINE

Also a representative list of glandular products and pharmaceuticals.

U. S. STANDARD PRODUCTS CO.

WOODWORTH, WISCONSIN, U. S. A.

PHYSICIANS PREFER *Gentle Pressure* IN LAXATION



Section of the mesenterium showing the fluid exchange system through blood vessels whereby water is drawn into the bowel to help form "liquid bulk."

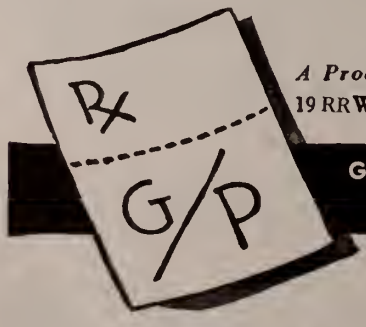
For years SAL HEPATICA has been the choice of many physicians for gentle yet thorough laxative action.

Added to water, SAL HEPATICA makes a sparkling saline solution that follows nature's own methods—utilizes the gentle pressure created by "liquid bulk" to stimulate peristalsis.

This "liquid bulk" flushes the intestinal tract and gently but effectively cleanses it of undesirable waste. In most cases relief comes quickly, usually within an hour.

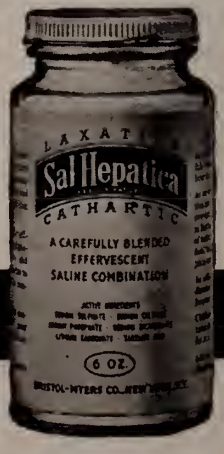
SAL HEPATICA is simple to administer, pleasant to take, and prompt in yielding a response. Its gentle pressure can be depended on to relieve constipation without irritation.

SAL HEPATICA



A Product of BRISTOL-MYERS COMPANY
19 RR West 50th Street • New York 20, N. Y.

GENTLE PRESSURE FOR GENTLE YET THOROUGH LAXATION





a troublesome symptom . . .



Alumina Gel with Liquid Petrolatum 10% Wyeth

"All patients with peptic ulcer eventually develop constipation."[1] Low residue diet, inactivity and worry are responsible. But the troublesome symptom can be controlled by development of "habit time" and administration of emulsified mineral oil.

AMPHOJEL*, the standard antacid for the management of peptic ulcer, is also supplied with emulsified mineral oil as a convenient dosage form for ulcer patients with a tendency to constipation.

1. PAUL, W. D., and C. RHOMBERG, J. Iowa State M. A. 35:167 (May) 1945.

*REG. U. S. PAT. OFF.

Bottles of 12 fl. oz.

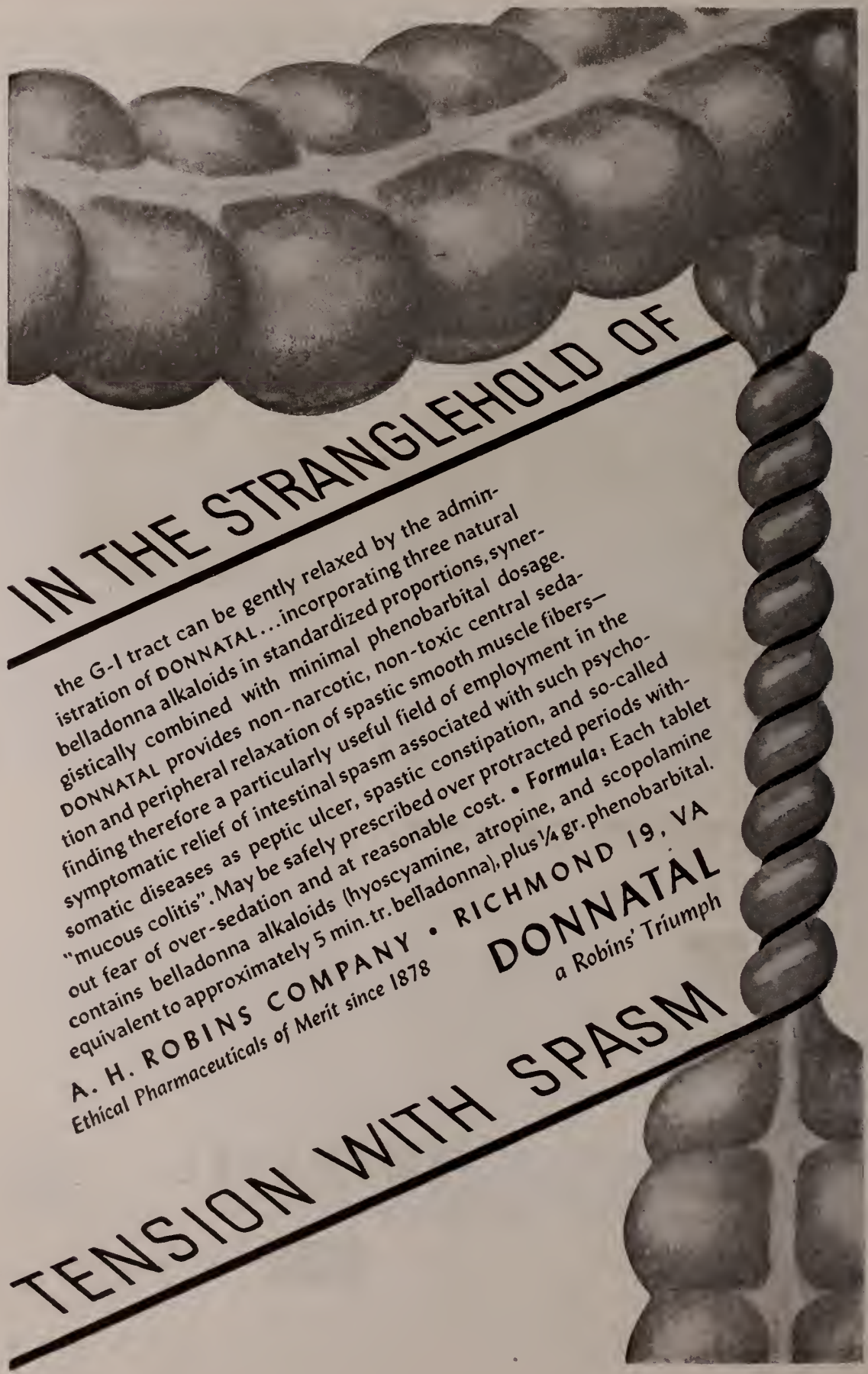
AMPHOJEL

WITH MINERAL OIL

Wyeth

REG. U. S. PAT. OFF.

WYETH INCORPORATED • PHILADELPHIA 3 • PA.


IN THE STRANGLEHOLD OF
the G-I tract can be gently relaxed by the administration of DONNATAL...incorporating three natural belladonna alkaloids in standardized proportions, synergistically combined with minimal phenobarbital dosage. DONNATAL provides non-narcotic, non-toxic central sedation and peripheral relaxation of spastic smooth muscle fibers—finding therefore a particularly useful field of employment in the symptomatic relief of intestinal spasm associated with such psychosomatic diseases as peptic ulcer, spastic constipation, and so-called "mucous colitis". May be safely prescribed over protracted periods without fear of over-sedation and at reasonable cost. • Formula: Each tablet contains belladonna alkaloids (hyoscyamine, atropine, and scopolamine equivalent to approximately 5 min. tr. belladonna), plus ¼ gr. phenobarbital.
A. H. ROBINS COMPANY • RICHMOND 19, VA
Ethical Pharmaceuticals of Merit since 1878
DONNATAL
a Robins' Triumph
TENSION WITH SPASM

DEPENDABILITY... the most important quality in a contraceptive

the extra assurance
with every tube of
Koromex Jelly

TIME TESTED CLINICAL RECORD



with confidence

prescribe...

ACTIVE INGREDIENTS: Boric acid 2.0%, oxyquinolin benzoate 0.02% and phenylmercuric acetate 0.02% in a base of glycerin, gum tragacanth, gum acacia, perfume and de-ionized water.

write for literature

HOLLAND-RANTOS CO., Inc.
551 FIFTH AVENUE · NEW YORK 17, N. Y.



. . . many of your patients will be harassed by a variety of pruritic skin irritations which require prompt, symptomatic treatment.

Your patients with ivy and oak poisoning, summer prurigo, insect bites and other dermatoses commonly encountered during the summer season will welcome the prompt, soothing relief provided by 'Caligesic' Analgesic Calamine Ointment.

A greaseless, bland cream with anesthetic, analgesic, astringent and protective properties, 'Caligesic' Ointment does not stain the skin and may be used safely on infants. It is also useful in the symptomatic treatment of such conditions as intertrigo, pruritus ani, pruritus vulvae and pruritus scroti.

Each 100 Gm. contains: Calamine, 8.00 Gm.; Benzocaine, 3.00 Gm.; Hexylated Metacresol, 0.05 Gm. Supplied in 1½ ounce tubes. Sharp & Dohme, Philadelphia 1, Penna.

'CALIGESIC' *ointment*

Analgesic Calamine Ointment (Greaseless)

SHARP & DOHME

NEW INCREASED POTENCIES!

100% MORE VITAMINS A AND D
OVER 40% MORE VITAMIN B_1
... NO INCREASE IN PRICE!

VI-SYNERAL





PROFESSIONAL SAMPLES AND LITERATURE

Each vitamin capsule (Special Group potency) now supplies:

Vitamin A (natural)	12,000 U.S.P. Units
Vitamin D (natural)	1,200 U.S.P. Units
Thiamine (B_1)	5.0 mg.
Riboflavin (B_2)	3.5 mg.
Niacinamide	20.0 mg.
Pyridoxine (B_6)	2.0 mg.
Calcium Pantothenate	5.0 mg.
Ascorbic Acid (C)	75.0 mg.
Alpha Tocopherol (E)	4.0 mg.
B Complex factors from	50 mg. yeast

The Vi-Syneral Mineral Capsule furnishes: Calcium, Phosphorus, Iron, Iodine, Copper, Manganese, Zinc, Magnesium.

New increased potencies (with natural Vitamins A and D) are also available in other special Vi-Syneral formulas: INFANTS and CHILDREN CHILDREN and ADOLESCENTS • ADULTS • EXPECTANT and NURSING MOTHERS.

U. S. VITAMIN CORPORATION • 250 E. 43 St. • NEW YORK 17, N. Y.

P. R. N.

The Jocular Jingles of C. G. F.

by

Charles G. Farnum M. D.
Peoria, Ill.

CONTENTMENT

I've been weeks in a hospital bed,
I have aches from my feet to my head,
All the pills I must take
Come both early and late
And I loathe all the things I am fed.

There is always soap left in my ears,
Icy alcohol brings forth the tears,
With a throb in my head
And some crumbs in my bed
I am all apprehension and fears.

Intravenous when outside the vein
Is just that much additional pain;
The monotonous view
From a window or two
Is no theme for a gladsome refrain.

But whatever the form of your curse
Your affliction might always be worse,
You could even be dead
Or forever in bed,
All in spite of your doctor and nurse.

So contentment just saturates me
And for one thing I chuckle with glee,
Although painful and slow
To the bath room I go
And I don't have to use a B.P.

THE ONE WE FOLLOW

I have read from the preachings
And the writings and teachings
Of the saints and the prophets of old,
To discern what we swallow
Or believe in or follow
Of their wisdom so often retold.

I read the works of Samuel,
Isaiah, Zephaniah
And Jonah, Moses, Solomon,
Hosea, Obediah,
Ezekiel and Joshua,
And Ruth and Zachariah,
And Joel, Aaron, Abraham,
And Micah, Jeremiah,
And Esther, Amos, Malachi,
And David, Nehemiah,
And Ezra, Job and Haggai,
And Daniel, Hezekiah.

As we study them coldly,
We can state it quite boldly,
As in memories chain they pass by us,
That the things most far reaching
In their writing or teaching,
Are the precepts of old Ananias.

FOOD FOR A MAN

When a man wants pie
He wants just pie,
And he doesn't want ice cream plastered on top.
When a man wants peas
He wants just peas,
And he doesn't want carrots scattered through the crop.

When a man wants cutlets
He wants just cutlets,
And he doesn't want them hidden between some gooey batter.

When a man wants fish
He wants just fish,
And he doesn't want parsley or blue grass on the platter.

When a man wants steak
He wants just steak,
And he doesn't want it smothered —leave steak in solitude.

When a man wants food
He wants just food
And he doesn't want adornments, for he wants food nude.

PANACEA

"You are senile, old man," the young doctor said,
"And your legs wobble when the wind blows;
That double yolked egg that you think is your head
Makes the water leak out of your nose."
"I know it, young feller," the old man replied,
"As a kid I once had blood boil,
But the flaxseed poultices peeled off the hide,
And I should have had more castor oil."

"You are senile, old man" the young doctor said,
"And your arteries are ready to crack,
You walk like your feet had been made out of lead,
You've a hump the full length of your back."
"You are right, young feller," the old man confessed,
"Takin' sulphur-molasses aint hard
But all this skunk oil that they rubbed on my chest
Should be goose grease or turpentined lard."

"You are senile, old man," the young doctor said,
"You are up fourteen times every night,
Most all of your teeth have dropped out of your head
And your heart's in a dangerous plight."
"You're all wet, my boy," the old man thumbed his nose,
"None o' them things will ever kill me;
I got assafoetida all through my clothes,
And each spring I drink sassafras tea."

THE VALUE OF KNOX GELATINE IN PEPTIC ULCER MANAGEMENT

Many physicians are finding Knox Gelatine a practical aid in the frequent between-meal feedings that are so often desirable in the management of peptic ulcer.

Given at hourly intervals, Knox Gelatine provides a satisfactory control of the gastric secretions and brings relief from the painful symptoms.

Also, many physicians regularly prescribe the *Special Ulcer Diet* described in the Knox booklet, "Peptic Ulcer Dietary." This is a complete diet... bland, and liberal in calories and protein. We will be happy to send you as many copies as you wish.

For the free *Peptic Ulcer Dietary*... and any of the other dietaries listed here... address your request to Knox Gelatine, Box 483, Johnstown, N. Y.

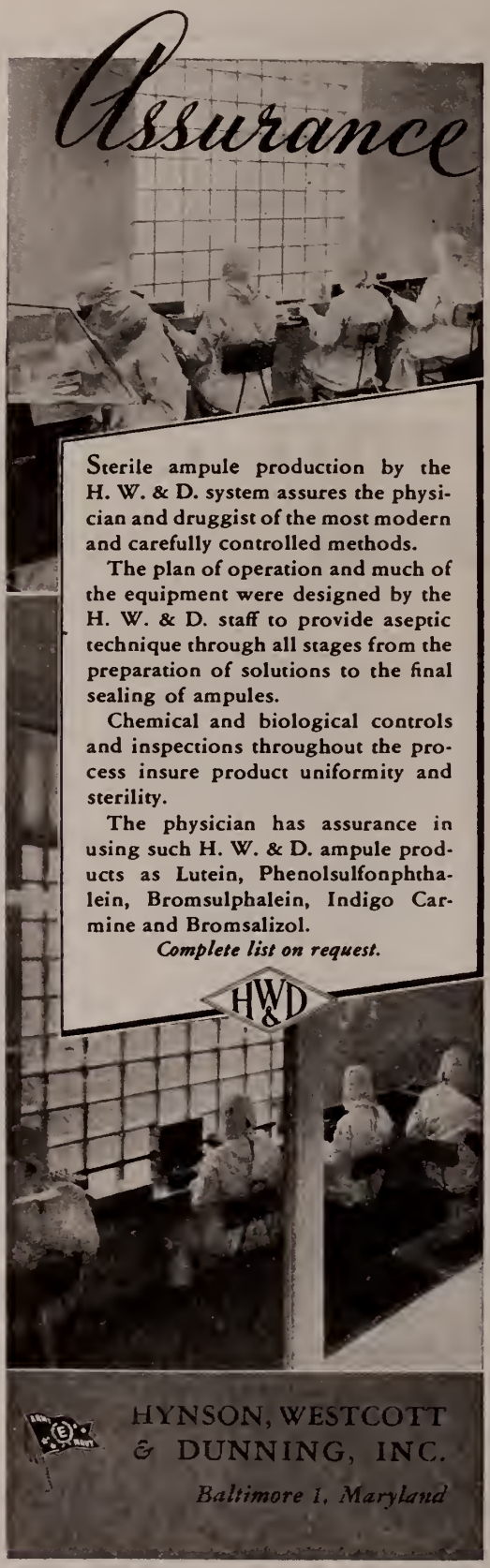
FREE!

Peptic Ulcer Dietary — **Diabetic Diets**
Knox Gelatine Drink — **Infant Feeding**
Feeding Sick Patients — **Reducing Diets and Recipes**
Protein Value of Plain, Unflavored Gelatine

KNOX GELATINE U. S. P.

PLAIN, UNFLAVORED GELATINE...ALL PROTEIN, NO SUGAR

Knox Products Keep Pace Through Laboratory and Clinical Research



REMOVE BORIC ACID FROM USE ENTIRELY, PEDIATRICIAN SAYS

Claims Poisonous Drug Should Be Taken Off Hospital Shelves And Replaced By More Effective Germicides

Boric acid, which has caused the accidental deaths of several infants during the last few years, should be removed from use entirely, says E. H. Watson, M.D., of Ann Arbor, Mich., in the September 29 issue of *The Journal of the American Medical Association.*

Dr. Watson, who is connected with the Department of Pediatrics and Communicable Diseases at the University of Michigan Medical School, believes that boric acid has been superseded today by more effective germicides and preparations.

Urging doctors to discourage the use of boric acid because of its limited usefulness, Dr. Watson says:

"It cannot sensibly be argued that an effective drug should be dropped from use simply because the occasional patient reacts unfavorably to the ordinary dose or because untoward reactions follow the accidental administration of an excessive dose. When, however, a drug can be shown to be almost entirely ineffective and at the same time dangerous even when used in ordinary ways, it is time to remove that drug from general use as rapidly as possible. Boric acid is such a drug."

From time to time in the past, boric acid administered in milk formulas caused the deaths of numerous babies. Last year Dr. R. R. Cross, director of public health of Illinois, requested hospitals to eliminate boric acid from the inventory of drugs kept on hand for use in maternity hospitals, and Morris Fishbein, M.D., editor of *The Journal* of the A. M. A., urged at the same time that boric acid be "strictly segregated from those substances which may be incorporated into infant food." Even as far back as 1927, *The Journal* said editorially:

"As long as there are human beings handling devices or drugs of possible danger, accidents will occur. . . . Boric acid is so frequently used as a household article that its power for harm is ordinarily overlooked. Yet its potential danger is such that its use as a food preservative has long been forbidden in the United States.

(*Continued on page* 60)

To lessen renal complications during administration of sulfonamides Combisul-TD

Combisul-TD is a combination of sulfaTHIAZOLE and sulfaDIAZINE in equal parts in one tablet. Administration of these two sulfonamides together reduces the likelihood of renal involvement even though the total quantity of sulfa drugs is the same as when either is used alone.[1,2] Danger of calculus formation with oliguria and anuria is largely eliminated by *Combisul-TD*, for even crystalluria is uncommon. The chemotherapeutic activity of *Combisul-TD* is equivalent to that obtained when either constituent is used in full dosage.



Combisul-TD available in 0.5 Gm. tablets each containing 0.25 Gm. sulfathiazole and 0.25 Gm. sulfadiazine. Indications and dosage are the same as for either drug administered alone.

For the treatment of meningitis, *Combisul-DM* consisting of 0.25 Gm. sulfadiazine and 0.25 Gm. sulfamerazine is available.

Combisul-TD available in 0.5 Gm. tablets. Bottles of 100 and 1000.

Combisul-DM available in 0.5 Gm. tablets. Bottles of 100 and 1000.

1. Lehr, D.: Proc. Soc. Exper. Biol. & Med. **58**:11, 1945.
2. Lehr, D.: In press.

Trade-Marks *Combisul-TD* and *Combisul-DM*—Reg. U. S. Pat. Off.

SCHERING

Schering CORPORATION · BLOOMFIELD · N. J.
In Canada, Schering Corporation Limited, Montreal



DUTY CONSCIOUS

Equally Effective in:
Constipation • Colitis
Diarrhea



**Zymenol Contains Pure Aqueous Brewers Yeast (no live cells)*

Zymenol makes the bowel duty conscious by maintaining normal intestinal content through Brewers Yeast Enzymatic Action* and aiding restoration of normal intestinal motility with Complete Natural Vitamin B Complex.*

Natural urge to defecate is re-established without carthar-sis, artificial bulkage or large doses of mineral oil.

Economical teaspoon dosage avoids oil leakage and does not affect vitamin absorption.

Write for FREE Clinical Size



gentle reminder

For the patient with functional constipation, 'AGAROL'* Emulsion serves as a gentle reminder rather than a violent summons. This emulsion of mineral oil with phenolphthalein and an agar-gel permits effective, yet gentle relief through:

1. Replacement of lubricating factors with highly emulsified mineral oil and a colloidal gel similar to mucin in its lubricating properties.
2. Replacement of moisture through its distinctive hydrophilic action.
3. Minimal threshold stimulation of peristaltic activity.

These actions are integrated to promote the formation of a consolidated, lubricated and easily passed fecal mass. Simultaneously, they encourage physiologic restoration of the patient's own evacuatory mechanisms.

For additional pharmaceutical details consult your pharmacist—for more extensive medical data write Medical Division of William R. Warner & Co.

William R WARNER and Co. Inc. 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'agarol'

Emulsion of mineral oil with phenolphthalein and an agar-gel. Dispensed in bottles of 6, 10 and 16 fluidounces.

*Trademark Reg. U. S. Pat. Off.

BORIC ACID (Continued)

France, Germany, Holland, Italy and Spain."

Dr. Watson states that boric acid preparations were removed from use in the children's ward of University Hospital several years ago.

"Probably the principal uses of boric acid or its solutions are in the eye and for irrigating body cavities," Dr. Watson writes. "Both of these uses have been abandoned in the University Hospital. Boric acid solution as ordinarily used in eye wash is probably without significant antiseptic or germicidal properties — many newer antiseptics are far superior to it. As a lavage to remove pus from the eye a weak solution of sodium bicarbonate is much more effective."

After pointing out that boric acid is a very weak germicide, Dr. Watson says: "The medical profession as a whole probably puts unwarranted confidence in boric acid preparations and is likely to forget that boric acid is a poison."

Tuberculosis is a social problem with a medical aspect. Sir William Osler.

IRON DEFICIENCY ANEMIA MISTAKEN FOR VITAMIN B COMPLEX DEFICIENCY

Iron deficiency anemia is frequently confused with vitamin B complex deficiences, according to William J. Darby, M.D., of Nashville, Tenn., writing in the March 30 issue of *The Journal of the American Medical Association.*

Dr. Darby, who is from the Department of Medicine, Vanderbilt University School of Medicine, presents the case reports of six patients who showed no abatement of symptoms after treatment with B vitamins. These same patients were then treated with iron and almost immediate improvement was noted.

Iron is a necessary part of hemoglobin, the red coloring matter of blood. The symptoms of iron deficiency are manifested by a mild anemia, inflammation of the tongue and sometimes an inability to swallow. Iron deficiency anemias are more common among women than men.



COUNCIL ACCEPTED

Theocalcin

for the failing heart

A Wise Choice of Diuretic
and
Myocardial Stimulant

TIME PROVED - EFFECTIVE ORALLY
EASILY TOLERATED

To reduce edema and diminish dyspnea and to improve heart action prescribe 1 to 3 Theocalcin Tablets (7½ gr. each) t. i. d.

Theocalcin (theobromine-calcium salicylate), Trade Mark, Bilhuber.

BILHUBER-KNOLL CORP. ORANGE NEW JERSEY

WHAT IS THE PLACE OF CANDY

in the Daily Dietary?

THE nutritional requirements of man have been established with a high degree of accuracy in the laboratory. Specific amounts of the various essential nutrients have been determined as being necessary for optimal nutritional health. Yet translation of these needs into terms of foodstuffs poses many problems in view of individual food likes and dislikes and eating habits. Hence the vast differences seen in meal composition.

Certain eating habits however are common to a large number of persons, and can be observed in a high percentage of individuals. Among these is the virtually universal desire for candy, a desire manifested by children and adults alike.

Candy is eaten almost instinctively following meals for the sense of satiety it brings, and between meals when the organism is in need of rapidly available and quickly utilizable food energy.

Thus candy assumes the position of a food, supplying its share of nutrients required daily. Candies made of milk, butter, eggs, fruits, nuts, etc., as well as energy-yielding carbohydrates, contribute the valuable substances contained in those foods.

THE NUTRITIONAL PLATFORM OF CANDY

1. Candies in general supply high caloric value in small bulk.

2. Sugar supplied by candy requires little digestive effort to yield available energy.

3. Those candies, in the manufacture of which milk, butter, eggs, fruits, nuts, or peanuts are used, to *this* extent also—

(a) provide biologically adequate proteins and fats rich in the unsaturated fatty acids;
(b) present appreciable amounts of the important minerals calcium, phosphorus, and iron;
(c) contribute the niacin, and the small amounts of thiamine and riboflavin, contained in these ingredients.

4. Candies are of high satiety value; eaten after meals, they contribute to the sense of satisfaction and well-being a meal should bring; eaten in moderation between meals, they stave off hunger.

5. Candy is more than a mere source of nutriment—it is a morale builder, a contribution to the joy of living.

6. Candy is unique among all foods in that it shows relatively less tendency to undergo spoilage, chemical or bacterial.

This Platform is Acceptable for Advertising in the Publications of the American Medical Association

COUNCIL ON CANDY OF THE NATIONAL CONFECTIONERS' ASSOCIATION

1 NORTH LA SALLE STREET
CHICAGO 2, ILLINOIS



Red comfort

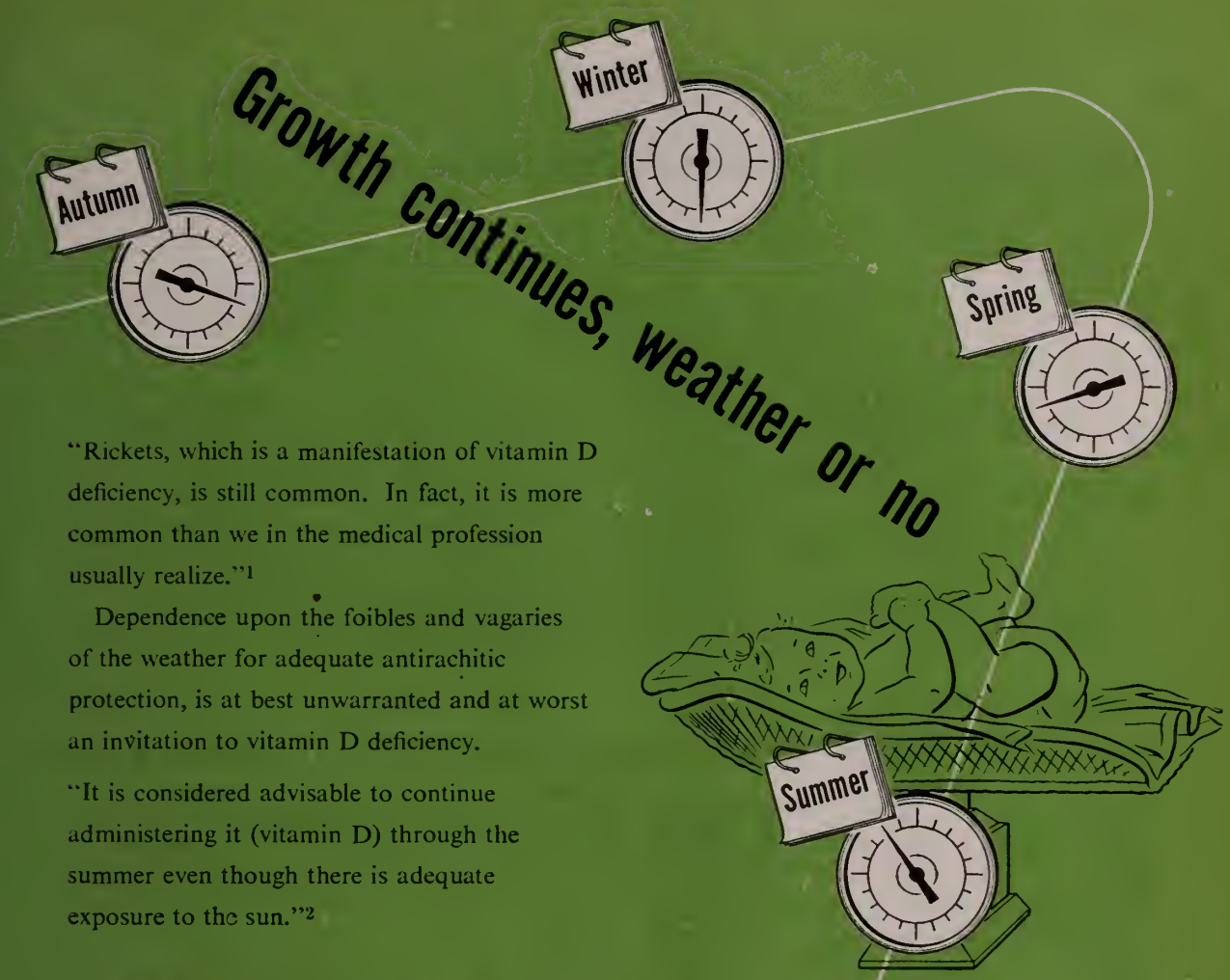
Serenium soothes inflamed genito-urinary membranes while possessing low toxicity and a wide margin of safety. Effective in either acid or alkaline urine, this red dye (diamino-4'-ethoxy-azobenzene hydrochloride) halts the growth of most bacterial urinary invaders. Administered orally, Serenium tablets ease the patient's discomfort and constitute an effective weapon against genito-urinary infections.

SQUIBB

Serenium TRADEMARK

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858

Growth continues, weather or no



"Rickets, which is a manifestation of vitamin D deficiency, is still common. In fact, it is more common than we in the medical profession usually realize."[1]

Dependence upon the foibles and vagaries of the weather for adequate antirachitic protection, is at best unwarranted and at worst an invitation to vitamin D deficiency.

"It is considered advisable to continue administering it (vitamin D) through the summer even though there is adequate exposure to the sun."[2]

White's COD LIVER OIL CONCENTRATE

provides vitamins A and D—derived exclusively from cod liver oil—in the proportions as found in U.S.P. cod liver oil.

Prescribing White's Cod Liver Oil Concentrate winter, spring, summer and autumn avoids risk and assures adequate intake of vitamins A and D to meet the needs of physiologic growth every month of the year.

Liquid for drop dosage, Tablets which may be chewed, and small, easily swallowed Capsules, provide acceptable dosage forms spanning needs from infancy through maturity.

Infant antirachitic prophylactic dosage costs *less than a penny a day*.

1. Spies, Tom, M.D., Nov. 17, 1944, over the Blue Network.
2. Beckman, Harry, M.D., "Treatment in General Practice," 4th Ed. Pub. by W. B. Saunders Co. 1943.

Council accepted. Ethically promoted. White Laboratories, Inc. Newark 7, N. J. *Not advertised to the laity.*

Illinois State Medical Society

OFFICERS OF SECTIONS, 1945-1946

SECTION ON MEDICINE
L. E. Hines, Cbmn., 104 S. Micbigan Avenue, Cbicago
W. H. Newcomb, Secy., Jacksonville

SECTION ON SURGERY
G. E. Johnson, Cbmn., 1000 W. 59th Street, Cbicago
J. B. Moore, Secy., Benton

SECTION ON EYE, EAR, NOSE & THROAT
Beulab Cushman, Chmn., 25 E. Washington Street, Chicago
H. L. Ford, Secy., Cbampaign

SECTION ON PUBLIC HEALTH & HYGIENE
E. A. Piszczek, Chmn., 737 S. Wolcott Avenue, Chicago
Richard F. Boyd, Secy., Springfield

SECTION ON RADIOLOGY
P. R. Dirkse, Chmn., St. Francis Hospital, Peoria
Frank L. Hussey, Secy., 250 E. Superior Street, Chicago

SECTION ON PEDIATRICS
John F. Carey, Chmn., Joliet
G. N. Krost, Secy., 2376 E. 71st Street, Chicago

SECTION ON OBSTETRICS & GYNECOLOGY
J. P. Greenbill, Cbmn., 55 E. Washington Street, Cbicago
E. N. Nash, Secy., Galesburg

SECTION ON PATHOLOGY
H. R. Fishback, Chmn., 303 E. Chicago Avenue, Chicago
M. C. Corrigan, Secy., 2839 Ellis Avenue, Cbicago

COUNTY SOCIETIES

This list is corrected in accordance with the best information obtainable at the date of going to press. County Secretaries are requested to notify The Journal of any changes or errors.

County	President	Secretary
Adams	Aldo Germann, Quincy	Walter Stevenson, Quincy.
Alexander	J. K. Rosson, Cairo	J. S. Johnson, Cairo.
Bond	D. T. Brown, Mulberry Grove	Katberine B. Luzader, Greenville.
Boone	M. L. Hartman, Belvidere	S. J. Smith, Belvidere.
Bureau	F. E. Inks, Princeton	Gerald S. McShane, Spring Valley.
Calhoun	(See Pike-Calboun)	R. E. Davies, Spring Valley.
Carroll	C. E. Turner, Savanna	W. J. Scholes, Lanark, Ill.
Cass	T. G. Charles, Beardstown	R. A. Spencer, Beardstown.
Champaign	C. S. Bucher, Champaign	J. D. McKinney, Champaign.
Christian	G. C. Bullington, Pana	W. S. Miller, Assumption.
Clark	C. O. Highsmith, Westfield	H. C. Houser, Westfield.
Clay	J. P. Shore, Sailor Springs	D. Curtis Henderson, Clay City.
Clinton	J. A. Bauer, Germantown	J. Q. Roane, Carlyle.
Coles-Cumberland	G. B. Dudley, Charleston	S. B. Nuzil, Mattoon.
Cook	J. J. Moore, Chicago	W. W. Furey, Chicago.
Crawford	B. C. Teasley, Jr., Robinson	L. P. Sloan, Oblong
De Kalb	Ralph G. McAllister, DeKalb	Paul W. Carney, DeKalb
De Witt	Chas. S. Bogardus, Clinton	Wm. R. Marshall, Clinton.
Donglas	E. J. Gross, Arcola	J. O. Cletcher, Tuscola.
Du Page	Allan S. Watson, Glen Ellyn	A. R. Richli, Naperville.
Edgar	H. D. Junkin, Paris	Paul E. Fleener, Paris.
Edwards	Andrew Krejar, West Salem	R. L. Moter, Albion.
Effingham	G. R. Marshall, Effingham	H. B. Runde, Teutopolis.
Fayette	A. M. Fromm, Ramsey	E. A. Kuehn, Vandalia.
Ford	A. L. Potts, Gibson City	Edward A. Tappan, Paxton.
Franklin	O. L. Rutberford, Christopber	R. E. Steck, Christopher
Fulton	W. H. Betts, Havana	P. D. Reinertson, Canton
Gallatin	E. W. Burroughs, Shawneetown	James A. Kirby, New Haven.
Greene	A. D. Wilson, Carrollton	W. H. Garrison, Wbite Hall.
Hancock	I. W. Salowitz, Plymouth	Blair Kelly, Ferris.
Hardin	S. E. Oxford, Cave-in-Rock	
Henderson	M. J. Babcock, Biggsville	Elmer T. Swann, Oquawka.
Henry	Worling R. Young, Geneseo	P. J. McDermott, Kewanee.
Iroquois	A. W. Fordyce, Gilman	Ryland Buckner, Gilman
Jackson	Wm. F. Felts, Carbondale	Edward K. Ellis, Murphysboro.
Jasper	Wm. E. Franke, Newton	C. O. Absher, Newton.
Jefferson Hamilton	C. O. Hamilton, Mt. Vernon	T. B. Williamson, Mt. Vernon
Jersey	Hugh R. Bohannan, Jerseyville	Bert M. Brewster, Jerseyville.
Jo Daviess	G. C. McGinnis, Warren	R. E. Logan, Galena.
Johnson	Wm. Thompson, Cypress	E. A. Veach, Vienna.
Kane	Vernon L. Evans, Aurora	K. M. Manougian, Elgin.
Kankakee	Robert Bedard, Kankakee	A. L. Nickerson, Kankakee.
Kendall	No Society	
Knox	Wm. Johnson, Galesburg	G. K. Smart, Galesburg.
Lake	Morley D. McNeal, Highland Park	R. M. Watrous, Highland Park.
La Salle	John L. Rock, Oglesby	F. J. Maciejewski, La Salle.
Lawrence	R. B. Armitage, Lawrenceville	L. W. Frame, Lawrenceville.
Lee	S. P. Stackhouse, Dixon	J. M. Lund, Dixon.
Livingston	O. L. Bettag, Pontiac	E. G. Beatty, Pontiac.
Logan	Chester Davis, Lincoln	R. Lynn Ijams, Atlanta.
McDonough	W. E. Carnahan, Macomb	W. M. Hartman, Macomb.

*Deceased.

(Continued on page 66)



In the Nutrition Problems of
CHRONIC CHOLECYSTITIS

Because of the low fat intake which is frequently necessary, many foods and beverages are denied the patient with chronic gall bladder disease. If dietary curtailment becomes too drastic, however, nutritional deficiencies are apt to develop, adding further complications and physical discomfort.

The delicious food drink prepared by mixing Ovaltine with skim milk provides many of the nutrients considered essential in hepatobiliary disease, without appreciably increasing the fat intake. Its biologically adequate protein, readily utilized carbohydrate, B complex and other vitamins, as well as essential minerals aid in satisfying the need for these nutrients. This readily digested food supplement makes a nutritionally excellent as well as delicious component of the extra feedings which are frequently required in the management of chronic cholecystitis.

THE WANDER COMPANY, 360 N. MICHIGAN AVE., CHICAGO 1, ILL.



Ovaltine

Three servings daily of Ovaltine, each made of ½ oz. of Ovaltine and 8 oz. of skim milk*, provide:

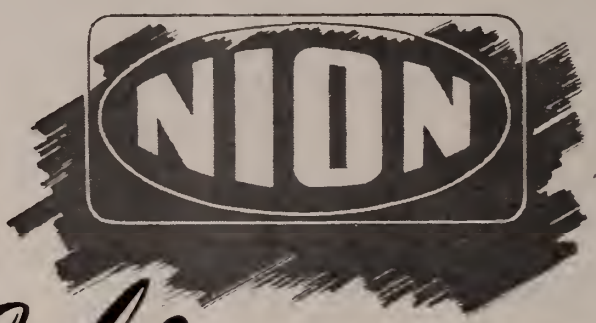
CALORIES	426	VITAMIN A	2058 I.U.
PROTEIN	32.3 Gm.	VITAMIN B_1	1.16 mg.
FAT	2.5 Gm.	RIBOFLAVIN	1.55 mg.
CARBOHYDRATE	66.3 Gm.	NIACIN	6.81 mg.
CALCIUM	1.12 Gm.	VITAMIN C	39.6 mg.
PHOSPHORUS	0.939 Gm.	VITAMIN D	400 I.U.
IRON	12.0 mg.	COPPER	0.50 mg.

*Based on average reported values for skim milk.

(County Officers Continued)

McHenry	A. V. Lindberg, Crystal Lake	E. E. Kunde, Marengo
McLean	O. M. Thompson, Bloomington	E. M. Stevenson, Bloomington
Macon	S. G. Smith, Decatur	M. D. Murfin, Decatur
Macoupin	George Hess, Bunker Hill	D. J. Zerbolio, Benld.
Madison	H. M. Cravens, Collinsville	E. F. Moore, Collinsville.
Marion	H. L. Logan, Salem	H. O. Williams, Centralia.
Mason	C. H. Stubenrauch, Havana	W. A. Steele, Havana.
Massac	Stephen P. Ward, Metropolis	G. F. Cummins, Metropolis.
Menard	T. V. Plews, Petersburg	H. P. Moulton, Petersburg.
Mercer	L. E. Robinson, Aledo	V. A. McClanahan, Aledo.
Monroe	E. T. Lark, Columbia	**J. A. Werth, Waterloo.
Montgomery	Wm. T. Douglas, Hillsboro	Nelson K. Floreth, Litchfield
Morgan	V. T. J. Lenth, Jacksonville	G. L. Drennau, Jacksonville
Moultrie	R. C. Coffey, Bethany	W. B. Kilton, Sullivan.
Ogle	L. R. McDaniel, Polo	A. R. Bogue, Rochelle.
Peoria	Fred Decker, Peoria	W. E. Owen, Peoria.
Perry	G. H. Gutridge, Du Quoin	H. I. Stevens, Tamaroa.
Piatt	A. M. Bruner, Bement	W. N. Sievers, White Heath.
Pike	James Goodman, Pleasant Hill	Myer Shulman, Pittsfield.
Pope		L. S. Barger, Golconda.
Pulaski	Homer J. Elkins, Mounds	Otis T. Hudson, Mounds.
Randolph	Ralph Kuhlman, Menard	W. W. Fullerton, Steeleville.
Richland	Alexis T. Telford, Olney	H. N. Fisher, Olney.
Rock Island	Rolland O. Salg, Rock Island	N. C. Barwasser, Moline.
St. Clair	Olin B. Boyd, E. St. Louis	F. E. Bihss. E. St. Louis.
Saline	N. A. Thompson, Eldorado	R. V. Ferrell, Eldorado
Sangamon	C. S. Mayes, Springfield	Wm. DeHollander, Springfield
Schuyler	A. W. Ball, Rushville	H. O. Munson, Rushville.
Scott	No Society	
Shelby	H. H. Pettry, Cowden	C. H. Hulick, Shelbyville.
Stephenson	C. M. Becker, Freeport	D. J. Doelker, Freeport
Tazewell	Roland C. Wherry, Pekin	Russel K. Taubert, Pekin.
Union	B. V. Rife, Anna	E. V. Hale, Anna.
Vermilion	H. E. Ross, Danville	Holland Williamson, Danville
Wabash	E. P. Keneipp, Mt. Carmel	H. A. Elkins, Mt. Carmel.
Warren	J. O. Firth, Monmouth	Chas. P. Blair, Monmouth.
Washington	P. B. Rabenneck, Nashville	G. A. Green, Nashville.
Wayne	Gilbert T. Ranson, Fairfield	Kenneth O. Hubble, Fairfield
White	C. J. Rosenberg, Norris City	L. R. Medoff, Grayville.
Whiteside	R. H. Lester, Morrison	G. J. Pohly, Sterling.
Will-Grundy	L. J. Wilhelmi, Joliet	Joseph Trizna, Joliet.
Williamson	J. W. Tidwell, Herrin	M. M. May, Marion
Winnebago	Anfin Egdahl, Rockford	John O. Heald, Rockford.
Woodford	R. E. Gordon, El Paso	W. S. Morrison, Minonk.

*Deceased



Calcicaps WITH Iron

A New Calcium, Phosphorous, Iron *and Vitamin D Product*

For use in pregnancy and lactation, or whenever Calcium and Iron therapy is indicated.

EACH CALCICAP CONTAINS:

Ferrous gluconate, 1 grain — Dicalcium Phosphate, 4½ grains
Calcium gluconate, 3 grains — Vitamin D, 375 U.S.P. units

Samples and literature on request.

NION CORPORATION • LOS ANGELES 38, CALIFORNIA

Your Advertisers

This is an index of those who serve the Medical Profession and support your journal. All advertisers are approved by your Journal Committee. It will help you to mention your Journal when writing them.

BODY SUPPORTS

The Spencer Corset Co., Inc., New Haven, Conn. .....
J. E. Hanger, Inc., Chicago 5 71

CLASSIFED

Classified Advertisements 72

EQUIPMENT

General Electric X-Ray Corp., 2012 Jackson Blvd., Chicago .....

FINANCIAL AND INSURANCE

Crane Discount Corp., New York, N. Y. 70
Medical Protective Co., Fort Wayne, Ind. 3
Physicians Casualty Co., Omaha, Neb. 68

FOODS

American Meat Institute, Chicago, Ill. 42
Borden Company, 350 Madison Ave., New York 29
Coca Cola, Atlanta, Ga. .....
Knox Gelatin Laboratories, Johnstown, N. Y. 55
Mead Johnson & Co., Evansville, Ind. .. Inside Back Cover
National Confectioner's Ass'n., Chicago 2, Ill. 61
National Dairy Products, New York, N. Y. .....
Nestle's Milk Products, Inc. .....
Wander Company, 360 N. Michigan Ave., Chicago 65

PHARMACEUTICALS

Abbott Laboratories, North Chicago, Ill. 19
Ames Co., Inc., Elkhart, Ind. .....
ArEx Cosmetics, Chicago 72
Ayerst McKenna & Harrison, Ltd., New York 16 9
Bilhuber-Knoll Corp., Orange, N. J. 60
Bristol Laboratories, Inc., Syracuse, N. Y. .....
Bristol-Myers Co., New York 48
Burroughs Wellcome & Co., New York 17, N. Y. 27
Ciba Company, Summit, N. J. 6
Crookes Laboratories, Inc., 305 E. 45th St., N. Y. 17, N. Y. 45
Otis E. Glidden & Co., Evanston 58
Gold Pharmacal Co., New York 71
Harrower Laboratory, Chicago 1, Ill. 43
Hoffman-LaRoche, Inc., Nutley, N. J. 33
Holland-Rantos Co., Inc., 551 Fifth Ave., New York 51
Hynson, Westcott & Dunning, Charles and Chase Sts., Baltimore 56
International Vitamin Corp. .....
Irwin, Neisler & Co., Decatur, Ill. 41
Lanteen Medical Laboratories, Chicago 10 30
Thos. Leeming Co., 155 E. 44th St., N. Y. 17, N. Y. ... 10
Lilly, Eli & Co., Indianapolis, Ind. 36, 37, 38
Maltbie Chemical Co., Newark, N. J. 8
S. E. Massengill Co., Bristol, Tenn. 24
McNeil Laboratories, Inc., Philadelphia, Pa. 32
Merck & Co., Rahway, N. J. 20
Morris, Phillip & Co., 119 Fifth Ave., New York 22
National Oil Products Co. .....
Nepera Chemical, Younkers, N. Y. 44
Nion Corporation, Los Angeles, Calif. 66
Num Specialty Co., Pittsburgh, Pa. 70
Parke, Davis & Co., Detroit, Mich. 26
Pitman-Moore Co., Indianapolis 6, Ind. 17
Rare Chemicals, Inc., Flemington, N. J. 25
Reed & Carnrick, Jersey City 6, N. J. .....
Rees-Davis Drugs, Inc., Meriden, Conn. 18
Reynolds & Co., R. J., Winston-Salem 39
Riedel-de Haen, Inc., New York City 40
A. H. Robins Co., Richmond 19, Va. 50
Roche-Organon, Inc., Nutley, N. J. 12
J. B. Roerig & Co., 536 Lake Shore Drive, Chicago .. 14, 15
Schenley Laboratories, Inc. 31
Schering Corporation, Bloomfield, N. J. 13, 57
Julius Schmid, Inc., 423 W. 55th St., New York City .. 16
G. D. Searle & Co., P. O. Box 5100, Chicago .....
..... Inside Front Cover
Sharp & Dohme, 111 N. Canal St., Chicago 52
Smith, Kline & French .....
E. R. Squibb & Sons, New York 62
Frederick Stearns & Co., Detroit 11
United Rexall Drug Co. 46
Upjohn Co., Kalamazoo, Mich. 28
U. S. Standard Products, Woodworth, Wisc. 47
U. S. Vitamin Corp., 250 E. 43rd St., New York 17, N. Y. 53
Walker Vitamin Products, Inc., Mount Vernon, New York .....
Wm. R. Warner & Co., 113 W. 18th St., New York .. 7, 59
Warren-Teed Products Co., Columbus 8, Ohio 34
Winthrop Chemical Co., 70 Varick St., New York 23
White Laboratories, Inc., Newark, N. J. 4, 5, 63
Whittaker Laboratories, Inc., New York City 35
Wyeth, Inc., Philadelphia 21, 49
Zemmer Co., Pittsburgh, Pa. 72

SANATORIA AND SANITARIA

Costeff Sanitarium, Peoria, Ill. 70
Edward Sanatorium, Naperville, Ill. 68
Kenilworth Sanitarium, Kenilworth, Ill. 69
Michell Sanatorium, Peoria, Ill. 69
Milwaukee Sanitarium, Wauwatosa, Wis. ..... Back Cover
Norbury Sanatorium, Jacksonville, Ill. 68
North Shore Health Resort, Winnetka 71
Mary E, Pogue School, Wheaton, Ill. .....
Stokes Sanitarium, Louisville, Ky. 72
Weirick's Sanitarium, Elgin, Ill. 72

RADIUM

Central X-Ray & Clinical Laboratory, 58 E. Washington St., Chicago, Ill. 71
Physicians Radium Assn., 55 E. Washington St., Chicago 69

The NORBURY SANATORIUM

JACKSONVILLE, ILLINOIS — INCORPORATED and LICENSED

For the Treatment of Nervous and Mental Disorders

DR. ALBERT H. DOLLEAR, Superintendent
DR. FRANK GARM NORBURY, Medical Director
DR. SAMUEL N. CLARK, Physician
DR. HENRY A. DOLLEAR, Associate Physician
DR. FREDERICK A. CAUSEY, Associate Physician in Residence

Address Communications — THE NORBURY SANATORIUM, Jacksonville, Illinois

ACCIDENT - HOSPITAL - SICKNESS

INSURANCE

FOR PHYSICIANS, SURGEONS, DENTISTS EXCLUSIVELY

ALL PREMIUMS COME FROM — PHYSICIANS SURGEONS DENTISTS — ALL CLAIMS GO TO

$5,000.00 accidental death $25 weekly indemnity, accident and sickness	**$8.00** Quarterly
$10,000.00 accidental death $50 weekly indemnity, accident and sickness	**$16.00** Quarterly
$15,000.00 accidental death $75 weekly indemnity, accident and sickness	**$24.00** Quarterly

ALSO HOSPITAL EXPENSE FOR MEMBERS, WIVES AND CHILDREN

86c out of each $1.00 gross income used for members' benefit

$2,800,000.00 INVESTED ASSETS — **$13,000,000.00 PAID FOR CLAIMS**

$200,000.00 deposited with State of Nebraska for protection of our members.

Disability need not be incurred in line of duty—benefits from the beginning day of disability

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION

43 years under the same management
400 First National Bank Building — OMAHA 2, NEBRASKA

TRIODINE FOR PSYCHOMOTOR ATTACKS

Tridione, a new drug whose effect on epilepsy is still being investigated, has brought spectacular results in some cases of psychomotor seizures, a condition in which mental disturbance is the principal feature of the attacks.

Writing in the March 2 issue of *The Journal of the American Medical Association,* Russell N. DeJong, M.D., from the Department of Neurology, University of Michigan Medical School and University Hospital, Ann Arbor, Mich., says that thus far tridione has not proved to be sufficiently effective when used alone, partly owing to the fact that most of the patients in his study were also subject to other types of epilepsy. These had been treated by anticonvulsant drugs such as phenobarbital and the bromides but in no instance were psychomotor attacks controlled by these drugs. The drugs were continued with the tridione, Dr. DeJong says.

Psychomotor seizures are characterized by loss of memory during which the patient may act like one intoxicated. The attacks may last only a few minutes or they may go on for hours or days. While in this state the patient is morose and irritable and may become ugly or violent if forcibly restrained. Patients are often incapacitated by the attacks, and, as the result of the nature of the seizures, may require custodial or institutional care.

In conclusion the author says that tridione used in

Edward Sanatorium

NAPERVILLE, ILLINOIS
(30 miles west of Chicago)
Est. 1907 by Dr. Theodore B. Sachs

FOR THE TREATMENT OF TUBERCULOSIS

MEDICAL STAFF

Jerome R. Head, M.D.—Medical Director
Frank Seligson, M.D.—Medical Superintendent

Ideally situated — beautiful landscaped surroundings — modern buildings and equipment
A-A rating by Illinois Department of Health

For detailed information apply to—

Chicago Office of Edward Sanatorium — 343 S. Dearborn St., Chicago, Wabash 8111

NERVOUS and MENTAL DISEASES

FOR MILD CASES *FOR SEVERE CASES*

MICHELL FARM — **MICHELL SANATORIUM**

Licensed by State of Illinois

George W. Michell, M.D., Medical Director

INFORMATION ON REQUEST

106 North Glen Oak Ave., Ph. 3-5179, Peoria, Ill.

Chicago Office:

46 East Ohio Street . . . Phone Delaware 6770



conjunction with other anticonvulsants "has almost completely controlled the psychomotor seizures in a large percentage of the cases and has resulted in a decided psychologic improvement."

CLOVER PREPARATION DELAYS BLOOD CLOTTING IN HEART DISEASE

A preparation of spoiled sweet clover has been used successfully to delay clotting of the blood in patients with coronary thrombosis. Three investigators, comparing an untreated group with a treated group of patients, found that this drug reduced the death rate.

Writing in the February 16 issue of *The Journal of the American Medical Association,* the three investigators—H. Raymond Peters, M.D., J. Roy Guyther, M.D., and Charles E. Brambel, Ph.D., of Baltimore—say that of the 60 patients treated in the usual routine manner with bed rest, 13 died. Of the 50 treated with dicumarol, the spoiled sweet clover drug, only two died.

These 110 cases were studied during the last three years at Mercy Hospital in Baltimore. The investigators are from the Departments of Medicine and Clinical Biochemistry, Mercy Hospital Division, University of Maryland School of Medicine.

In coronary thrombosis a clot forms in one of the coronary arteries, or more frequently in one of the branches, and a portion of the heart muscle is deprived of blood for a length of time sufficient to do damage.

(*Continued on page 70*)

Radium Rental Service

By

THE PHYSICIANS RADIUM ASSOCIATION

Organized for the purpose of making radium available to physicians to be used in the treatment of their patients. Radium loaned to physicians at moderate rental fees, or patients may be referred to us for treatment if preferred.

●

The Physicians Radium Association

Room 1307—55 East Washington St., Pittsfield Bldg., CHICAGO 2, ILL.

Telephones: Central 2268-2269

Wm. L. Brown, M.D., Director

Kenilworth Sanitarium

Resident Staff
EDWARD J. KELLEHER, M. D.
Director
RICHARD D. HUFF, M. D.
Associate

Consultant Staff
THOMAS L. FENTRESS, M. D.
HARRY R. HOFFMAN, M. D.
SAMUEL H. KRAINES, M. D.
WILLIAM J. NOLAN, M. D.

A PRIVATE SANITARIUM FOR THE CARE AND TREATMENT OF MENTAL AND NERVOUS ILLNESSES, ALCOHOLISM AND DRUG ADDICTIONS

2228 BEECHWOOD AVE., WILMETTE, ILL.

Mailing address:
P. O. Box 600
Kenilworth, Ill.

Telephones
Wilmette 351
Wilmette 1662

CLOVER PREPARATION (Continued)

The seriousness of the accident depends on the size and location of the branch blood vessel which is stopped up by the clot.

The authors say that they observed an increased clotting tendency in most of their cases of acute coronary thrombosis. Dicumarol, which was discovered when hemorrhagic disease was studied in cattle, reduces the occurrence of complications by delaying the clotting of the blood.

In conclusion the authors say that the drug can be administered for an indefinite time as ill effects were not noted.

RECOMMEND THUM
to discourage thumb-sucking and nail biting
Apply like nail polish
50¢ at all drug-stores $1.00
THUM contains extract of capsicum (2.34%) in a base of acetone nail lacquer and isopropyl alcohol
Acceptable for Advertising in Publications of the American Medical Association

IMMEDIATE SURGERY REDUCES DEATH RATE FROM RUPTURED SPLEEN

Immediate operation reduces fatalities among patients with ruptured spleens caused by injury, according to two Boston doctors writing in the February 2 issue of *The Journal of the American Medical Association.*

H. William Scott Jr. and J. Robert Bowman, from the Department of Surgery, Harvard Medical School, observed seven patients with ruptured spleens at the Children's Hospital, Boston, from 1937 to 1944. Six of the seven patients were operated on within three hours after entry to the hospital, while one was observed for 16 hours before surgery was performed. All recoverd.

The authors state that "the general mortality resulting from this injury in all age groups as indicated by the literature has averaged about 30 per cent. In recent years the mortality has declined." The complete elimination of mortality from this injury lies with immediate surgery. The doctors attribute the improvement "to earlier recognition with prompt surgical intervention and to the greater availability of blood and blood substitutes and their use in replacing the blood loss."

All of the functions of the spleen are not known, but the fact that it is a part of the blood-forming mechanism is fairly well established. The spleen is not essential to life, however, since it has been shown that when it is removed because of injury or disease at any age, the expectation of life is not affected. It is a large glandlike organ situated in the upper part of the abdominal cavity on the left side.

The symptoms in splenic rupture are abdominal pain, acute blood loss, varying degrees of shock, pallor, nausea and vomiting, according to the authors.

All the patients were boys ranging in age from 4 to 13 years. Three of the seven patients were injured in falls and three in sledding accidents; one was struck by a falling object.

Books Received

The following books have been received for reviewing, and are herewith acknowledged. This listing should be considered as a sufficient return for the courtesy of the sender. Books that appear to be of unusual interest will be reviewed as space permits each month. Readers desiring additional information relative to books listed, may write the Editor who will gladly furnish same promptly.

THE DIAGNOSIS OF NERVOUS DISEASES: By Sir James Purves-Stewart, K.C.M.G., C.B., Knight of St. John of Jerusalem, M.D., Edin., F.R.C.P., Consulting Physician to Westminster Hospital, to the West End Hospital for Nervous Diseases, and to the Royal National Orthopaedic Hospital. Member Correspondant de la Société de Neurologie de Paris; Honorary

COSTEFF SANITARIUM
Mental and Nervous Disorders
Alcoholism and Drug Addiction
• SHOCK TREATMENT (Insulin, Metrazol Electro-shock) administered in suitable cases.
• ARTIFICIAL FEVER THERAPY
Home like environment, individual attention. MODERATE RATES.
Licensed by the State of Illinois
HARRY COSTEFF, M. D., Medical Director
1109 NO. MADISON AVE., PEORIA, ILL.
Phone 4-0156 Literature on request.

POST WAR COLLECTIONS
Our Post War Plan is a friendly aid to patients in paying past due medical bills as they change from war pay to peace pay. Protect your fees by acting now. Write. Our local auditor will call and tell you all about it.
CRANE DISCOUNT CORPORATION
230 W. 41 St. New York 18, N. Y.



NORTH SHORE HEALTH RESORT

WINNETKA, ILLINOIS

on the Shores of Lake Michigan

A completely equipped sanitarium for the care of
nervous and mental disorders, alcoholism and drug addiction
offering all forms of treatment, including electric shock

Samuel Liebman, M.S., M.D.
Medical Director

FULLY APPROVED BY THE AMERICAN COLLEGE OF SURGEONS

225 Sheridan Road Phone Winnetka 211

Member of the American Neurological Association, and of the Neurological Societies of Philadelphia, New York, Copenhagen, Estonia, Buenos Aires, and Chile. Ninth Edition. A William Wood Book. The Williams & Wilkins Company, Baltimore, 1945. Price $11.00.

GASTRO-ENTEROLOGY: By Henry L. Bockus, M.D., Professor of Gastro-enterology, University of Pennsylvania Graduate School of Medicine. In three volumes, totaling about 2700 pages with about 900 illustrations, many in colors. Volume III — "The Liver, Biliary Tract and Pancreas, and Secondary Gastrointestional Disorders". 1091 pages with 427 illustrations, some in color. Philadelphia and London: W. B. Saunders Company, 1946. Price — 3 Vols. and separate desk index, $35.00.

MODERN MANAGEMENT IN CLINICAL MEDICINE: By F. Kenneth Albrecht, M.D., S. A. Surgeon, U. S. Public Health Service; Kansas State Tuberculosis Consultant; Formerly Clinical Director, U. S. Marine Hospital, Baltimore, Md., The Williams & Wilkins Company, Baltimore, 1946. Price $10.00.

THE SCIENCE AND ART OF MEDICINE. An Inaugural Lecture by Sir Lionel Whitby, C.V.O., M.C., M.D., (Cantab.), F.R.C.P. (Lond.), D.P.H. Regius Professor of Physic in the University of Cambridge. Cambridge at the University Press. 1946. Price $.50 The Macmillan Company, 60 Fifth Avenue, New York 11, N. Y.

Radium Rental
Prompt Service

Deep X-Ray & Radium Therapy

Central X-Ray & Clinical Laboratory

A. Grossman, M.D., Director of Tumor Dept.
58 E. Washington St., Dear. 6960
CHICAGO, ILL.

J. E. HANGER, inc.

1112 S. Michigan Ave. Chicago 5, Ill.
Phone Wab. 1135
1912 Olive St. St. Louis 3, Mo.
Phone CEntral 1088-1089

DURALUMIN AND ENGLISH WILLOW LIMBS
MECHANICAL ARMS
TRUSSES CANES CRUTCHES
INVALID CHAIRS
Illustrated Catalog Sent on Request

in whooping cough

ELIXIR BROMAURATE

IS A UNIQUE REMEDY OF UNIQUE MERIT

Cuts short the period of illness and relieves the distressing spasmodic cough. Also valuable in Bronchitis and Bronchial Asthma.
In four-ounce original bottles. A teaspoonful every 3 to 4 hours.

Prescribed by Thousands of Doctors

GOLD PHARMACAL CO. NEW YORK CITY

ZEMMER

Solution ISO-PHEDRIZEM Zemmer

Ephedrine Sulfate 1%
Chlorobutanol (Chloroform Derivative) ..... ½%
Sodium Chloride q.s. to make an Isotonic Aqueous Solution.
An Isotonic Solution for the treatment of congested nasal passages.
Supplied in 1 pint, 1 ounce dropper bottles and ½ ounce dropper bottles.
Literature and prices on request.

THE ZEMMER CO., Oakland Sta., Pittsburgh 13, Pennsylvania

IL-546

MORPHINE AND OTHER DRUG ADDICTIONS

Selected patients who wish to make good and learn how to keep well; methods easy, regular, humane. Dr. Weirick's Sanitarium, Elgin, Ill.

THE STOKES SANITARIUM 923 Cherokee Road, Louisville, Kentucky

Our **ALCOHOLIC** treatment destroys the craving, restores the appetite and sleep, and rehuilds the physical and nervous condition of the patient. Liquors withdrawn gradually, no limit on the amount necessary to prevent or relieve delirium.

MENTAL patients have every comfort that their home affords.

The **DRUG** treatment is one of gradual Reduction. It relieves the constipation, restores the appetite and sleep; withdrawal pains are absent. No Hyoscine or rapid withdrawal methods used unless patient desires same.

NERVOUS patients are accepted by us for observation and diagnosis as well as treatment.

E. W. STOKES, Medical Director, Established 1904.
Telephone—Highland 2101

Classified Ads

RATES FOR CLASSIFIED ADVERTISEMENTS—For 30 words or less: 1 insertion, $3.00; 3 insertions, $8.00; 6 insertions, $14.00; 12 insertions, $24.00; from 30 to 50 words: 1 insertion, $4.00; 3 insertions, $10.50; 6 insertions, $20.00; 12 insertions, $30.00. Extra words: 1 insertion, 10c each; 3 insertions, 25c each; 6 insertions, 40c each; 12 insertions, 50c each. A fee of 25c is charged for those advertisers who have answers sent care of the Journal. Cash in advance must accompany copy.

FOR SALE: 20 bed hospital, with all electrical equipment, and X-ray machine. Delivery room and nursery for obstetrical patients. Brick building, large territory, well established, located in Metropolis, Illinois, a city of 7000 population, surrounded by factories and good farming country. Can be bought at a reasonable price. Mrs. J. A. Fisher, Metropolis, Illinois.

FOR SALE: Private practice. Un-opposed. Essential area Minnesota Catholic Community. Population 2000. Five room office. Fully equipped. Hospital facilities. Present doctor leaving on account of health. Write full particulars Box 122, Illinois Medical Journal, 30 N. Michigan, Chicago 2.

WANTED: Residents in psychiatry, $1800 to $2400 a year; public health physicians, $3720 to $4320 a year; physicians, $3720 to $4320 a year; tuberculosis control physicians, $4320 to $5280 a year; psychiatrists, $4320 to $5280 a year; clinical directors, $5280 to $5940 a year. Illinois Dept. of Public Welfare, 176 W. Adams St., Chicago 3, Illinois.

WANTED: Laboratory helpers, $1260 to $1840 a year; laboratory technicians, $1560 to $1980 a year; laboratory technicians, $1800 to $2400 a year; x-ray technicians, $2100 to $2640 a year. Illinois Dept. of Public Welfare, Chicago 3, Illinois.

WANTED: Physician to serve as medical director for 35 bed tax supported tuberculosis sanatorium in middle west. Salary and maintenance. State qualifications and experience. Box 123, Illinois Medical Journal, 30 N. Michigan, Chicago 2.

FRIEDMAN PREGNANCY TESTS require only 48 hours. Write for mailing tube and vial. Established 1938. Price $5.00. Pregnancy Diagnostic Laboratories, H. S. Lames, D.V.M., Dysart, Iowa.

3/47

MALARIA FAKES SYPHILIS REACTIONS

In a study of 100 nonsyphilitic white male patients with vivax malaria, a mild form, two Army Medical Corps men reported that 33 cases showed a positive reaction to a blood test for syphilis. There were 11 doubtful and 56 negative reactions.

Writing in the November 10 issue of *The Journal of the American Medical Association*, Major Harry M. Robinson Jr., and Major William W. McKinney said that thereafter "weekly examinations of the blood were done on all patients with a reported positive or doubtful Kahn reaction until a negative reaction was obtained."

The results were: "83.8 per cent of those with positive reactions had negative reactions at the end of four weeks. Seventy per cent of those with doubtful reactions had negative reactions at the end of four weeks." In all cases the serum reaction for syphilis was negative at the end of 11 weeks.

The authors pointed out that "various investigators have reported on the incidence of false positive reactions in the blood of malarial patients." Three investigators, the authors wrote, "working with inoculated malaria in nonsyphilitic patients, found that all cases gave a false positive serologic test for syphilis at some time during the fever therapy."

The first wealth is health. Sickness is poor-spirited, and cannot serve anyone; it must husband its resources to live. But health answers its own ends, and has to spare; runs over, and inundates the neighborhoods and crooks of other men's necessities. Ralph Waldo Emerson.



LEG MAKE-UP FOR THE *ALLERGIC PATIENT*

3 SHADES
- PEACHGLOW (LIGHT)
- RIO (MEDIUM)
- SUNGLOW (DARK)

AR-EX COSMETIC HOSE contains no rosin, aniline dyes, or other known skin irritants. Goes on smoothly, does not rub off, but is easily removed with soap and water. *Send for Free Formulary.*



FREE FORMULARY

DR._____
ADDRESS_____
CITY_____
STATE_____

AR-EX COSMETICS, INC. 1036 W. VAN BUREN ST. CHICAGO 7, ILL.



© 1943, MEAD JOHNSON & CO.

WHEN interviewed between platefuls, this 11-months-old young man emphatically stated: "I have been brought up on Pablum and still like it, but some days when I'm in the mood for oatmeal, nothing satisfies me like Pabena!"

Nutritious, quick and easy to prepare, both products are for sale at drug stores.

MEAD JOHNSON & COMPANY, EVANSVILLE, IND., U.S.A.

N Y Acad of Med
5 Ave & 103rd St
New York N Y
Exch



FOR NERVOUS DISORDERS

MAINTAINING the highest standards for more than a half century, the Milwaukee Sanitarium stands for all that is best in the care and treatment of nervous disorders. Photographs and particulars sent on request.

Josef A. Kindwall, M. D.
Carroll W. Osgood, M. D.
William T. Kradwell, M. D.
Merle Q. Howard, M. D.
Lewis Danziger, M. D.
Russell C. Morrison, M. D.
Arthur J. Patek, M. D.

G. H. Schroeder
Business Manager

MILWAUKEE SANITARIUM

WAUWATOSA—WISCONSIN

PHYSICIAN'S CHICAGO OFFICE—1117 Marshall Field Annex—Wednesdays, 1-3 P.M.—

The ILLINOIS Medical Journal

VOL. 89 NO. 6
June, 1946



Everett P. Coleman hands historic gavel to Robert S. Berghoff

OFFICIAL JOURNAL OF THE ILLINOIS STATE MEDICAL SOCIETY

The "SMOOTHAGE" regimen in the treatment of constipation



A rounded teaspoonful of Metamucil stirred into a glass of water, milk or fruit juice, three times a day, provides the soft, mucilaginous bulk which is desirable for natural elimination. Metamucil contains no roughage, no oils, no chemical irritants.

Metamucil is the highly purified, nonirritating extract of the seed of the psyllium, Plantago ovata (50%), combined with anhydrous dextrose (50%). It mixes readily with liquids, is palatable, easy to take.

Supplied in 1-lb., 8-oz. and 4-oz. containers.

Metamucil is the registered trademark of G.D Searle & Co.

ACCEPTED AMERICAN MEDICAL ASSN

SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

Entered as Second-Class Matter July 21, 1919, at the Post Office, Oak Park, Illinois, under the Act of March 8, 1879. Acceptance for mailing at special rate of postage provided for in Section 1102, Act of October 8, 1917, authorized July 15, 1918. Office of Publications, 715 Lake Street, Oak Park, Ill.

Experience
has no substitute

In
Professional Protection
as in everything else
"knowing" comes from "doing"

With
the successful handling
of more than 60,000 malpractice claims
The Medical Protective Company
brings to its policyholders
Experience
which has no substitute

★

OUR DIRECTORS

have been actively and exclusively engaged in the administration of this protective service for the professions since the years indicated.

B. H. Somers, Pres.—1903

J. W. Brown	1922	G. R. Kirkup	1913
L. M. Ford	1923	F. E. McLucas	1918
L. L. Frank	1910	Dr. W. E. Neuenschwander	1928
H. W. Ginty	1911	B. H. Smith	1923
T. E. Haberkorn	1922	F. G. Somers	1928

THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA



malignancy incognito?

There is *no* danger with 'Anusol'* Hemorrhoidal Suppositories that the symptoms of serious rectal pathology will be masked—for 'Anusol' Hemorrhoidal Suppositories contain no narcotics, no anesthetics. The nerves of the rectal region are not anesthetized, thus permitting continued function of sensory warning mechanisms. 'Anusol' Hemorrhoidal Suppositories achieve relief of symptoms *safely,* by means of decongestion, lubrication and protection.

Schering & Glatz, Inc., a subsidiary of

William R. WARNER and Co. Inc 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'anusol'

*Trademark Reg. U. S. Pat. Off.

Available in boxes of 6 and 12 suppositories

Hemorrhoidal Suppositories

Reduced incidence of secondary post-tonsillectomy hemorrhage

"Preliminary study of the effects of routine post-operative use of sulfathiazole gum indicated a reduction in the incidence of secondary hemorrhage."†

White's
SULFATHIAZOLE GUM

...provides HIGH salivary concentration with LOW (negligible) systemic absorption

INDICATIONS: Local treatment of sulfonamide-susceptible infections of oropharyngeal areas; acute tonsillitis and pharyngitis—septic sore throat—infectious gingivitis and stomatitis—Vincent's infection. Also indicated in the prevention of local infection secondary to oral and pharyngeal surgery.

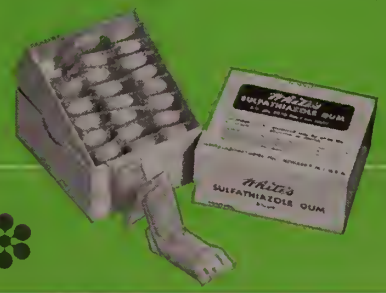
DOSAGE: One tablet chewed for one-half to one hour at intervals of one to four hours depending upon the severity of the condition. If preferred, several tablets—rather than a single tablet—may be chewed *successively* during each dosage period without significantly increasing the amount of sulfathiazole systemically absorbed.

Available in packages of 24 tablets, sanitaped, in slip-sleeve prescription boxes.

IMPORTANT: Please note that your patient requires your prescription to obtain this product from the pharmacist.

†*McGovern, F. H.: Prevention of Secondary Post-Tonsillectomy Hemorrhage with Sulfathiazole Gum, Arch. Otolaryn.:* 40:*196-197 (Sept.) 1944.*

"when the gum was chewed for one-half to one hour, the average salivary concentration of sulfathiazole was 70 mg. per hundred cubic centimeters. The blood sulfathiazole of children chewing 1 tablet for one-half hour for twelve daily doses showed a maximal concentration of 0.5 mg. per hundred cubic centimeters."†



A PRODUCT OF
WHITE LABORATORIES, INC.
PHARMACEUTICAL MANUFACTURERS,
NEWARK 7, N. J.



Hypochromic anemia, by impairing the oxygen-carrying power of the blood, may exert its deleterious influence on every organ of the body. Although the degree of depression of the hemoglobin level is often too slight to appear of clinical significance, the end result is frequently a syndrome comprising generalized vague, non-pathognomonic symptoms. The associated anorexia and consequent inadequate food intake, together with impaired digestion, all tend to initiate or accentuate multiple nutritional deficiencies.

Heptuna supplies ferrous sulfate, the most readily available form of iron for hemoglobin synthesis, together with seven essential vitamins and fortified with the B-complex vitamins found in liver and yeast. This combination makes for maximal absorption and utilization of iron, stimulates hemoglobin regeneration, and effectively corrects many of the generalized, systemic disturbances encountered in hypochromic anemia.

J. B. ROERIG & COMPANY • 536 Lake Shore Drive • Chicago 11, Illinois



Each Capsule Contains:

Ferrous Sulfate U.S.P.	4½ Grains
Vitamin A (Fish-Liver Oil)	5,000 U.S.P. Units
Vitamin D (Tuna-Liver Oil)	500 U.S.P. Units
Vitamin B_1 (Thiamine Hydrochloride)	2 mg.
Vitamin B_2 (Riboflavin)	2 mg.
Vitamin B_6 (Pyridoxine Hydrochloride)	0.1 mg.
Calcium Pantothenate	0.333 mg.
Niacinamide	10 mg.

Together with a Liver Concentrate (Vitamin fraction) derived from 6.5 Gm. fresh liver and dried yeast U.S.P.
Not intended for use in the treatment of pernicious anemia.

Heptuna

a **ROERIG** *Preparation*



NO FALSE COLOR TO THE PICTURE

NOW THAT PENICILLINASE SCHENLEY

IS AVAILABLE TO CHECK RESULTS





- In determining the progress of penicillin therapy, inhibitory concentrations of penicillin in the blood and other body fluids may prevent satisfactory culture of infecting organisms. But PENICILLINASE SCHENLEY will inactivate the penicillin in an hour's time. Penicillin-sensitive bacteria can then grow and a dependable bacteriologic evaluation be made.
- PENICILLINASE SCHENLEY is now produced in quantities sufficient to supply the needs of all medical laboratories.
- It is the latest product of Schenley Laboratories' research program, which to date has borne fruit in superior penicillin and penicillin products.

SCHENLEY LABORATORIES, INC.

Producers of Penicillin Schenley • Schenley Pharmaceuticals

Executive Offices: 350 Fifth Avenue, N. Y. C.



Individualized Treatment

for the prophylaxis or
therapeusis of

POLLEN ALLERGIES

★ Pitman-Moore pollen allergens are presented in specially designed individual treatment packages, which permit the dosage to be adjusted to individual sensitivity, a method definitely better than giving every patient the same dosage.

The permanency of these allergens is intensified by the use, in their production, of a special glycero-saline menstruum which insures full potency beyond the expiration date.

An Important Convenience Factor

When the case is of the typical seasonal type, with symptoms appearing annually shortly after the causative plants begin to bloom (grasses in the spring, ragweed in the fall) there is no necessity for making sensitization tests.

Pitman-Moore
Allergenic Extract
GRASS POLLENS
(Mixed) (Bio. 102)
(With sterile diluent)

from the pollens of grasses responsible for most cases of the spring type of pollen allergy ("rose fever"): blue grass, timothy, sweet vernal, Johnson grass and red-top.

(Each cc. of the concentrate contains 10,000 pollen units.)

ACCEPTED AMERICAN MEDICAL ASSN Council on Pharmacy and Chemistry

Pitman-Moore
Allergenic Extract
RAGWEED POLLENS
(Mixed) (Bio. 101)
(With sterile diluent)

from pollens of Giant Ragweed 50% and Short Ragweed 50%.

(Each cc. of the concentrate contains 10,000 pollen units.)

Write for "A Simplification of the Physician's Problem in the Prevention and Treatment of Pollinosis."

PITMAN-MOORE COMPANY

PHARMACEUTICAL AND BIOLOGICAL CHEMISTS

Division of Allied Laboratories, Inc., • Indianapolis 6, Indiana



DIAGNOSTIC DILEMMA

ORETON

Formulac

—vitamin-and-mineral-

fortified baby food



FORMULAC is a new baby food—a reduced milk in liquid form—fortified with sufficient vitamins and minerals to meet the nutritional needs of infants *without supplementary administration.*

FORMULAC was developed by E. V. McCollum, whose method of incorporating the vitamins and minerals *into the milk itself* lessens the risk of human oversight or error.

FORMULAC is promoted ethically. Clinical testing has proved it satisfactory in promoting infant growth and development.

FORMULAC is easily adjusted to meet each individual child's nutritional needs, by the addition of carbohydrates at your discretion.

FORMULAC—on sale at most grocery and drug stores —is priced within range of even low income groups.



• For professional samples and further information about this new infant food, mail a card to National Dairy Products Company, Inc., 230 Park Ave., New York 17, N. Y.

ACCEPTED AMERICAN MEDICAL ASSN.

DISTRIBUTED BY KRAFT FOODS COMPANY

NATIONAL DAIRY PRODUCTS COMPANY, INC.

New York, N. Y.

Extinguish the Pillars of Fire . . .



Fed by psychosomotic "fuel" in the form of hypersecretion, vogus irritotion ond intestinal spasticity, many cases of hyperkinetic intestinal disease may often be effectively "quenched" by Lusyn — newly creoted in the reseorch loborotories of The Maltbie Chemical Company to sotisfy the most modern concepts of rational therapy in spostic gastro-enteropathie and hyperchlorhydria, with least disturbance of physiologic processes. • At once an*tispasmodic* (by virtue of its homatropine methylbromide content) . . . *adsorbent* (through the alukalin component) and *sedative* (because of the phenobarbitol incorporated)—Lusyn brings prompt relief, yet is non-narcotic and will not produce secondary acid rebound. • *Indicated* in the treatment of pylorospasm—cardiospasm—unstoble colon—biliary dyskinesia—biliary colic—ond as an adjunct in the management of peptic ulcer. *Supplied* in bottles of 100 tablets each.

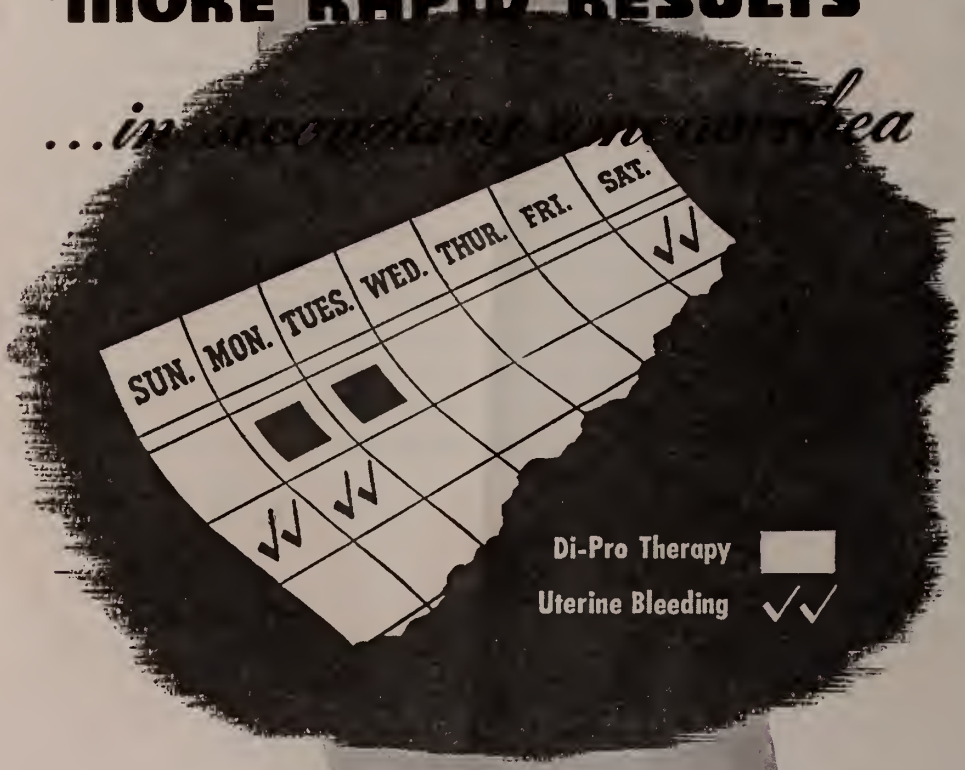
THE MALTBIE CHEMICAL COMPANY (Founded 1888) NEWARK, N. J.

LUSYN
TABLETS



'MORE RAPID RESULTS'*

...in secondary amenorrhea



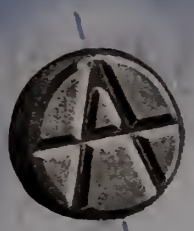
DI-PRO *ampuls*
'Roche-Organon'

Shortens duration of treatment. Offers greater convenience • Lowers cost of treatment • Reassures patient rapidly.

In the treatment of functional secondary amenorrhea of less than two years' duration, the use of DI-PRO ampuls 'Roche-Organon' provides "a rapid method for the induction of bleeding."* Only two injections on two successive days are needed to provoke uterine bleeding in most cases. Each injection consists of 2.5 mg of Dimenformon Benzoate and 12.5 mg of Progestin 'Roche-Organon,' mixed in the same syringe. DI-PRO ampuls are packaged for both one and three courses of treatment.

ROCHE-ORGANON, INC. • NUTLEY 10, N. J.

*S. C. Freed, *West. J. Surg.*, 54:1, 1946



yerst announces

the introduction of

"ENZIFLUR" TABLETS

Reg. U. S. Pat. Off

as an aid in the prevention of dental caries

Representing a new and important chapter in preventive medicine, clinical studies* have shown that vitamins C and D markedly enhance the action of calcium fluoride in the reduction of the caries experience rate in children.

Each "ENZIFLUR" Tablet provides:

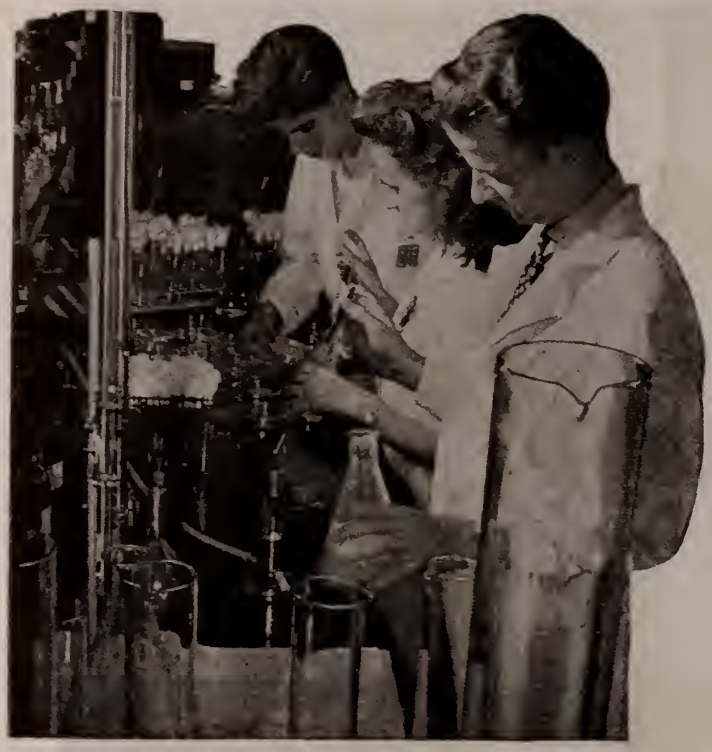
Calcium fluoride..... 2.0 mg.
Vitamin C (ascorbic acid).....30.0 mg.
Vitamin D (irradiated ergosterol)..400 I.U.
(U.S.P. XII)

One tablet daily supplies the optimal amount of fluorine and adult minimum requirements of vitamins C and D as an aid in the prevention of dental caries.

*Strean, L.P. and Beaudet, J.P.: New York State J. Med., 45:2183 (Oct. 15) 1945.

Ayerst

AYERST, McKENNA & HARRISON Limited
22 East 40th Street · New York 16, N. Y.



MERCK VITAMINS

Thiamine Hydrochloride U.S.P.
(Vitamin B_1 Hydrochloride)

Riboflavin U.S.P.
(Vitamin B_2)

Niacin
(Nicotinic Acid U.S.P.)

Niacinamide
(Nicotinamide U.S.P.)

Pyridoxine Hydrochloride
(Vitamin B_6 Hydrochloride)

Calcium Pantothenate Dextrorotatory

Ascorbic Acid U.S.P.
(Vitamin C)

Vitamin K_1
(2-Methyl-3-Phytyl-1,4-Naphthoquinone)

Menadione U.S.P.
(2-Methyl-1,4-Naphthoquinone)
(Vitamin K Active)

Alpha-Tocopherol
(Vitamin E)

Alpha-Tocopherol Acetate

Biotin

PURE VITAMINS

—*products of Merck Research*

Merck & Co., Inc. now manufactures all the vitamins commercially available in pure form, with the exception of vitamins A and D.

Merck research has been directly responsible for many important contributions to the synthesis, development, and large-scale production of individual vitamin factors in pure form.

In a number of instances, the pure vitamins may be considered to be products of Merck research. Several were originally synthesized in the Merck Research Laboratories, and others have been synthesized by Merck chemists and collaborators in associated laboratories.

Because most of the known vitamins have now been made available in pure form, effective therapy of specific vitamin deficiencies can be conducted on a rational and controlled basis, under the direction of the physician.



MERCK & CO., Inc. *Manufacturing Chemists* RAHWAY, N. J.

Symptomatic Treatment

SPECIFIC FOR ITS PURPOSE

THE specific action of Calmitol—control of pruritus—makes possible symptomatic therapy which can be directed against a host of unrelated conditions characterized by itching. For Calmitol stops itching promptly and dependably, regardless of underlying cause. Instantly effective, a single application controls the tormenting discomfort for hours. It quickly obviates the need for scratching, thus preventing development of secondary traumatic lesions and superimposed infection. Calmitol has proved this value in eczema, urticaria, ivy and other plant poisonings, dermatitis medicamentosa, ringworm, prurigo and intertrigo, and pruritis ani, vulvae, scroti, and senilis.







1. Pityriasis Rosea
2. Erythema Induratum
3. Ringworm of the Axilla
4. Eczematoid Ringworm Dermatitis



CALMITOL

THE DEPENDABLE ANTI-PRURITIC

Calmitol stops itching by minimizing transmission of offending impulses from cutaneous receptors and end-organs. Bland and nonirritating, the ointment can safely be applied to any skin or mucous surface. Active ingredients: camphorated chloral, menthol, and hyoscyamine oleate. Calmitol Liquid, prepared with an alcohol-chloroform-ether vehicle, should be used only on unbroken skin areas.

Thos. Leeming & Co. Inc.

155 East 44th Street, New York 17, N. Y.



A SAFE Summer PRESCRIPTION FOR INFANT NUTRITION

Even under the handicaps of travel or vacation accommodations, a mother can easily prepare a *safe* formula for her infant . . . by just adding cooled boiled water to Biolac according to the physician's directions. The simplicity of preparation (dilution only) minimizes possibilities of formula contamination even under adverse conditions.

In addition to safety and simplicity of preparation, Biolac formulas provide complete nutrition when supplemented with vitamin C. No chance omission of needed vitamins, carbohydrates or iron can occur. Biolac simply and safely affords nutritional elements for optimum health.

Easily calculated . . . quickly prepared. 1 fl. oz. Biolac to 1½ fl. oz. water per pound of body weight.



BORDEN'S PRESCRIPTION PRODUCTS DIVISION
350 MADISON AVENUE · · NEW YORK 17, N. Y.

Biolac

"BABY TALK" FOR A GOOD SQUARE MEAL

Biolac is a liquid modified milk, prepared from whole and skim milk, with added lactose, and fortified with vitamin B_1, concentrate of vitamins A and D from cod liver oil, and iron citrate. Evaporated, homogenized, and sterilized. Biolac is available in 13 fl. oz. cans at all drug stores.

ACCEPTED AMERICAN MEDICAL ASSN



When a Life Hangs in the Balance . . .

. . . and progressive wasting increases the gravity of the prognosis, depletion of body proteins can be prevented. Parenamine —parenteral source of the indispensable and other amino acids— provides the elements of protein nutrition . . . sustains the regenerative processes essential to recovery.

Parenamine

Amino Acids Stearns

PARENTERAL

For Protein Deficiency



PARENAMINE is a sterile 15 per cent solution of amino acids containing all known to be essential for humans, derived by acid hydrolysis from casein and fortified with pure *dl*-tryptophane.

INDICATED in conditions of restricted intake, faulty absorption, increased need or excessive loss of proteins such as in pre- and postoperative management, extensive burns, delayed healing, gastro-intestinal disorders, et cetera.

ADMINISTRATION may be intravenous, intrasternal or subcutaneous.

SUPPLIED as 15 per cent sterile solution in 100 cc. rubber-capped bottles.

Reprints and complete clinical data will gladly be sent on request.

Frederick Stearns & Company

Division

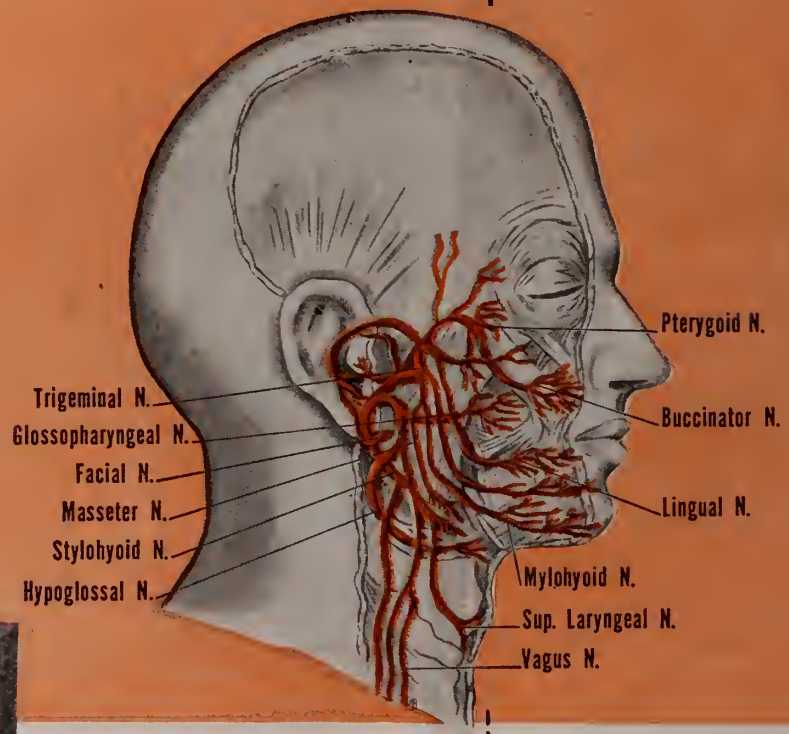
DETROIT 31, MICHIGAN

NEW YORK KANSAS CITY SAN FRANCISCO WINDSOR, ONTARIO SYDNEY, AUSTRALIA AUCKLAND, NEW ZEALAND

Trade-Mark *Parenamine* Reg. U. S. Pat. Off.

EFFECTIVE ANALGESIA

IN A HIGHLY INNERVATED AREA





The local pain and stiffness which follow a tonsillectomy are the result of injury to the fine network of sensory and motor nerves which honeycomb the area.

To effectively reach and relieve pain in this area, thousands of physicians are now prescribing Aspergum, because:

1. The patient thereby releases a soothing flow of saliva laden with acetylsalicylic acid that reaches and bathes *the recesses* of the pharyngeal mucosa and tonsillectomized fossae.
2. Traumatized tissues are kept moistened and less sensitive to pain.
3. Stimulation of muscle movement helps relieve local spasticity.
4. Earlier resumption of adequate diet is practicable.
5. The patient is more comfortable and convalescence is shortened.

The uniquely palatable form of Aspergum makes it especially useful in the treatment of children—and also adults who cannot or will not gargle.

Aspergum is available at prescription pharmacies in moisture-proof bottles of 36 tablets, packages of 16 and bottles of 250 tablets.

Ethically promoted—not advertised to the laity.

WHITE LABORATORIES, INC.
Pharmaceutical Manufacturers
NEWARK 7, N. J.



FOR POST-TONSILLECTOMY COMFORT

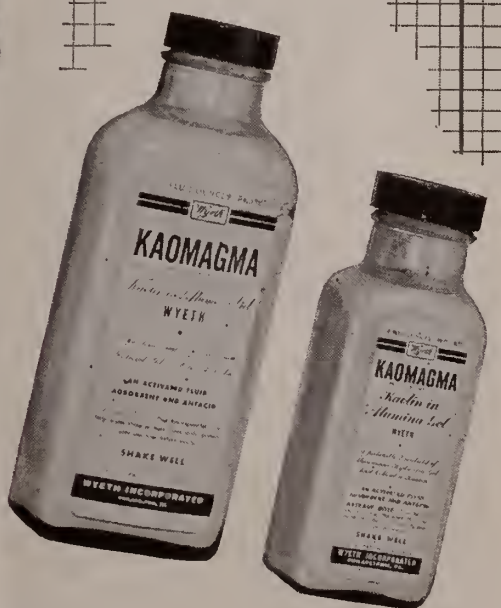
the diarrhea problem



"First we must check that diarrhea"

WELL OVER HALF of 500 consecutive cases of diarrhea treated in a typical metropolitan hospital had passed into the chronic stage.
—Am. J. Digest. Dis. *12*:261, 1945.

The symptom of diarrhea presents a difficult problem in diagnosis. But regardless of the fundamental cause, while specific therapy is being instituted, the diarrhea should be checked with KAOMAGMA.



SUPPLIED IN BOTTLES OF 6 AND 12 FL. OZ.

DOSE: 2 tablespoonfuls with water, then 1 tablespoonful after each bowel movement.

KAOMAGMA REG. U. S. PAT. OFF.

A PALATABLE EMULSOID OF ALUMINUM HYDROXIDE GEL AND COLLOIDAL KAOLIN

WYETH INCORPORATED *Wyeth* PHILADELPHIA 3, PA.

REG. U. S. PAT. OFF.



"I'll Be Right Over!"

...24 hours a day your doctor is "on duty"... guarding health... protecting and prolonging life...

• Plays... novels... motion pictures... have been written about the "man in white." But in his daily routine he lives more drama, and displays more devotion to the oath he has taken, than the most imaginative mind could ever invent. And he asks no special credit. When there's a job to do, he does it. A few winks of sleep ... a few puffs of a cigarette ... and he's back at that job again ...



According to a recent independent nationwide survey:

More Doctors Smoke Camels

than any other cigarette

R. J. Reynolds Tobacco Company, Winston-Salem, N. C.



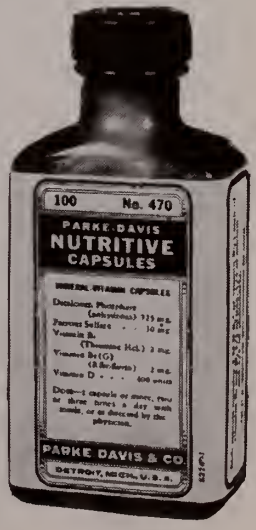
SUPPORT FOR THE FAULTY DIET

in Pregnancy • General Malnutrition • Convalescence

Family diets are often classified as "poor" because of certain vitamin-mineral deficiencies. These sub-clinical deficiencies become more serious in the presence of increased bodily demand as encountered in pregnancy, general malnutrition, and convalescence. Common among the deficiencies encountered are those of calcium, phosphorous, iron and vitamins B_1, B_2 and D.

To meet these deficiencies in a convenient single source, Parke-Davis offers

NUTRITIVE CAPSULES



EACH NUTRITIVE CAPSULE CONTAINS:

Dicalcium phosphate (anhydrous) (11 gr.)	725 mg.
Ferrous sulfate (½ gr.)	30 mg.
Vitamin B_1 (Thiamine hydrochloride)	2 mg.
Vitamin B_2 (Riboflavin)	2 mg.
Vitamin D	400 units

PARKE, DAVIS & COMPANY • Detroit 32, Michigan



In the severe depressions of the menopause marked by apathy and psychomotor retardation

Many women in the climacteric period develop a true reactive depression, characterized by apathy, psychomotor retardation and despondency.

• This depressive syndrome is frequently progressive; and, unless promptly and effectively treated, may seriously impair the patient's normal capacity for useful living.

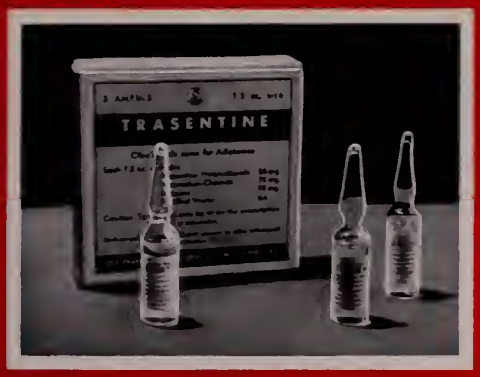
• In such cases, Benzedrine Sulfate helps to reawaken mental alertness and optimism, and to restore the savor and zest of life—especially when administered in conjunction with such fundamental measures as electric shock and estrogenic therapy.

• Obviously, Benzedrine Sulfate should not be used for the casual case of low spirits or normal physiologic depression, as distinguished from true prolonged mental depression. Smith, Kline & French Laboratories, Philadelphia, Pa.

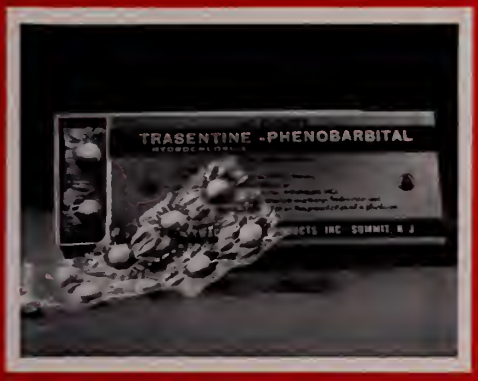
BENZEDRINE SULFATE

Tablets *Elixir*

(RACEMIC AMPHETAMINE SULFATE, S. K. F.)









4 FORMS of TRASENTINE

OFFER THE PHYSICIAN FOUR MEDICAL CHOICES
IN RELIEF OF SPASTIC PAIN



ONE OF TRASENTINE'S FOUR FORMS READILY ANSWERS THE PROBLEM OF SPASTICITY

When oral medication is the choice	➧ TRASENTINE TABLETS!
Is more immediate control of spasm necessary?	➧ TRASENTINE AMPULS FOR INJECTION!
Do you need control of spasm plus sedation?	➧ TRASENTINE-PHENOBARBITAL!
Is added control of spasm required, but without more sedation?	➧ ADDITIONAL TRASENTINE AS NEEDED, AFTER PREVIOUS ADMINISTRATION OF COMBINED TRASENTINE-PHENOBARBITAL!
Do nausea and vomiting prevent use of oral medication?	➧ TRASENTINE RECTAL SUPPOSITORIES!

Trasentine possesses the spasmolytic action of papaverine and atropine, without the undesirable side effects of the latter on the heart, pupil, accommodation and salivary glands.

Trasentine—Trademark Reg. U. S. Pat. Off. and Canada

MORE SELECTIVE MEDICAL MANAGEMENT

with

TRASENTINE AND TRASENTINE-PHENOBARBITAL

Pain and discomfort due to spasm are encountered in patients of many types and ages, and are frequently accompanied by other complicating conditions. Obviously, one form of antispasmodic cannot be used with success for all.

This is a leading reason why many physicians are prescribing Trasentine, in the administration form best suited to individual requirements. Ciba offers Trasentine in not one, but *four* forms. One or more of these medications will provide the route of choice and the necessary individualized control.

Trasentine, a non-narcotic antispasmodic of low toxicity, quickly and effectively relieves pain due to smooth muscle spasm. Trasentine-Phenobarbital adds central nervous system sedation to the spasmolytic action of Trasentine.

FOUR PRESCRIPTION FORMS—MULTIPLE USES

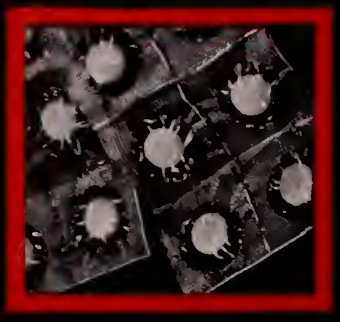
STOMACH and INTESTINE	UTERUS	GENITO-URINARY SYSTEM
Cardiospasm Gastric hypermotility Pylorospasm Spasticity of colon and duodenum involving sphincter of Oddi, biliary colic, peptic ulcer	Dysmenorrhea due to myometrial hypertonicity or excessive uterine contractions.	Urinary bladder spasm Neurogenic disease of bladder Ureteral colic To facilitate examinations, etc.



TRASENTINE

Trasentine Tablets—the most widely used form of Trasentine, for effective control of smooth muscle spasm.

ISSUED: Tablets each containing 75 mg. Trasentine. Available at your pharmacy in bottles of 20 and 50.



TRASENTINE-PHENOBARBITAL

Trasentine-Phenobarbital—for use where sedation of the central nervous system is an additional requirement.

ISSUED: Tablets each containing 20 mg. of Trasentine and 20 mg. of Phenobarbital, in boxes of 40 and 100.



TRASENTINE AMPULS

Trasentine Ampuls—for prompt clinical results. May be followed by other forms after control is established.

ISSUED: Ampuls of 1.5 cc., each containing 50 mg. of Trasentine Hydrochloride, in cartons of 5 and 20.



TRASENTINE SUPPOSITORIES

Trasentine Rectal Suppositories—prescribed especially in spastic dysmenorrhea, and in cases where nausea and vomiting preclude the use of oral medication.

ISSUED: Suppositories containing 100 mg., cartons of 5.



Steroid Hormones and Fine Pharmaceuticals

CIBA PHARMACEUTICAL PRODUCTS, INC.

SUMMIT, NEW JERSEY

In Canada: Ciba Company Limited, Montreal

NOW

PENICILLIN - C.S.C.

CRYSTALLINE SODIUM SALT

- ★ No Refrigeration Required
- ★ Pain upon Injection Minimized, Even in High Dosages
- ★ Well Tolerated and Effective Subcutaneously
- ★ Potency Clearly Stated on Label



NOTE THESE ADVANTAGES:

- Since refrigeration is not required, the physician's bag may now contain penicillin in the form of Penicillin-C.S.C. Crystalline Sodium Salt, so that administration may be made immediately at the first call, if indicated.
- Because of its high purity Penicillin-C.S.C. Crystalline Sodium Salt may be given in high dosages.

Available in serum-type vials containing 100,000, 200,000, or 500,000 units

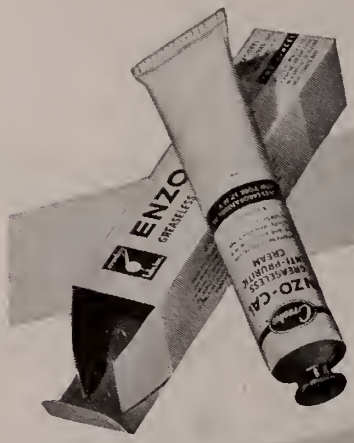
ACCEPTED AMERICAN MEDICAL ASSN Council on Pharmacy and Chemistry

Penicillin-C.S.C. is accepted by the Council on Pharmacy and Chemistry of the American Medical Assaciatian

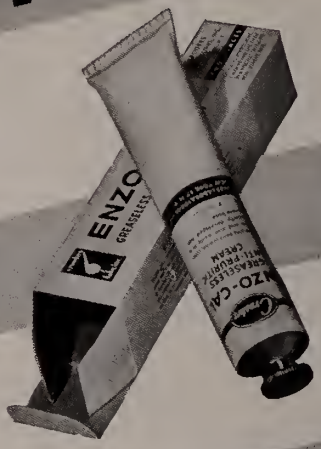
PHARMACEUTICAL DIVISION

COMMERCIAL SOLVENTS Corporation

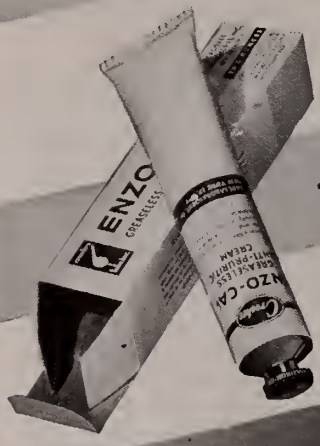
17 East 42nd Street New York 17, N. Y.



IN POISON IVY



IN SUN RASHES



FOR INSECT BITES

PRESCRIBE Enzo-CAL for ITCHING

- Prompt antipruritic action.
- Protects and aids healing.
- Cleaner and more convenient to use; patients prefer it.
- Soft, *greaseless* cream combining semi-colloidal calamine and zinc oxide with benzocaine.

CROOKES *Laboratories*
305 East 45th Street
New York 17, N. Y.



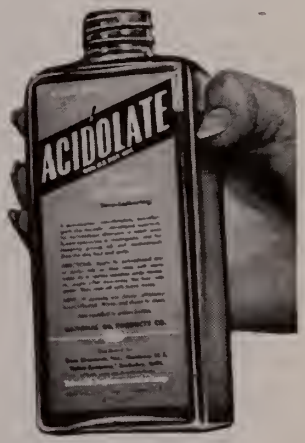
THE ANSWER TO A PERPLEXING QUESTION IN TREATING

INFANTILE ECZEMA

"*But Doctor*... HOW CAN I WASH THE BABY'S FACE WITHOUT USING SOAP?"

The answer, Doctor, is Acidolate . . . Cleansing the inflamed skin in infantile eczema when it is moist or oozing, scaly or crusted, has always been a major problem for the mother, the nurse, and the physician. It is satisfactorily solved by employing bland Acidolate instead of irritating soap.

Acidolate, a rational and effective replacement for soap, is non-irritating, non-alkaline (pH 6.25), non-abrasive, and hypo-allergenic. Low surface tension of this mild yet concentrated detergent permits deep penetration between and under the crusts and into the skin crevices. Acidolate blends easily with ointments, oils, creams, and accumulated skin secretions on gentle massage. Emulsification is brought about during the process of rinsing with water, preferably warm, thus facilitating their prompt removal. Such cleansing prepares the skin effectively for further therapy in infantile eczema as well as in other dermatoses.



"Oil on Troubled Skin"

ACIDOLATE

Reg. U. S. Pat. Off. and Canada

Non-Lathering, Sulfated-Oil Skin Detergent

Supply: 8 oz. and gallon bottles

RARE CHEMICALS, INC., Harrison, New Jersey

West Coast Distributors: GALEN COMPANY, Berkeley 2, Calif.

96J



Impaired

THYROID FUNCTION

Myxedema and cretinism are relatively rare diseases. Vastly more common are the milder grades of impaired thyroid function, in which hypometabolism due to hypothyroidism appears in the form of weakness, muscular fatigue, aches and cramps, nervousness, headaches, hebetude, and constipation.

There may be menstrual disturbances, skin dry and poor in tone, hair dry and lusterless, nails cracked and peeled.

These findings appear to be relatively frequent and, when due to hypothyroidism, respond successfully to thyroid medication with



ENDOTHYRIN

REG. U. S. PAT. OFF.

Concentrated Thyroid Extract

Consisting Principally of Thyroglobulin

A clinically tested, effective, well-tolerated thyroid product.

Supplied in ½ gr. tablets, equivalent in calorigenic activity to 1½ gr. U.S.P. Thyroid.

Bottles of 50, 100, 500, 1000.

THE HARROWER LABORATORY · GLENDALE CALIFORNIA · *at Your Service*

The HARROWER LABORATORY, Inc.

GLENDALE 5, CALIFORNIA

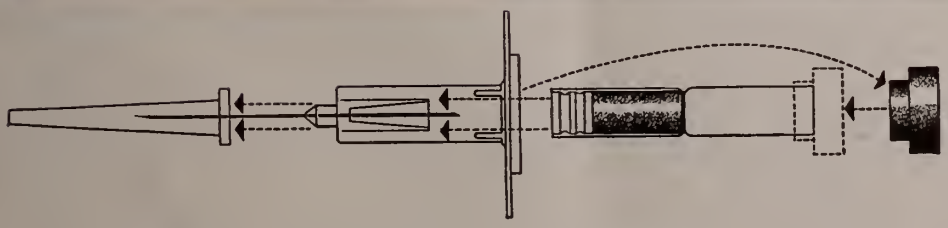
New York 7 Dallas 1 Chicago 1

as easy as.....



● Well, *almost.* That describes the preparation for an injection of the Romansky formula of penicillin calcium in oil and wax when the new Abbott Sterile Disposable Syringe Set is used. No further sterilization of syringe and needle. No drying. No complication caused by traces of water remaining in them. Eliminates the difficulty of drawing the heavy fluid into the syringe. Does away with the waste of suspension which cannot be withdrawn from the inside surfaces of a bulk container. Always a new, sharp, properly gauged needle. And, best of all perhaps, *there's no bothersome cleaning of needles or syringe afterward.* Just throw away. ● Set consists of a sterile syringe with an affixed 20-gauge, 1½-inch sterile, stainless steel needle, and a glass cartridge-plunger containing a 1-cc. dose of 300,000 units. ● Sorry that supply doesn't always meet demand, but we're producing larger quantities every day. ABBOTT LABORATORIES, NORTH CHICAGO, ILLINOIS.

Abbott's Disposable Syringe Set with *Penicillin* in Oil and Wax
(ROMANSKY FORMULA)



Toward a Better World



FROZEN FOOD HOME DELIVERY. This new service, fast expanding, brings frozen foods to the door, like the morning milk. Compared with our former season-restricted diet, the year-'round variety and excellence thus made available mark a revolutionary advancement in better living.

Progress is shown, too, in sociological betterment . . . the distribution by Lanteen Medical Laboratories of Lanteen products. These leaders in their field are produced under most rigid scientific standards.

Simplicity in properly placing the Lanteen Flat Spring Diaphragm makes it ideal for continued use. It is collapsible in one plane only—therefore, if the entering rim lodges against the cervix the trailing rim cannot be forced into the pubic arch. When largest possible comfortable size is fitted, proper position is assured. Available only through ethical sources, on physician's prescription or recommendation.



L A N T E E N

LANTEEN MEDICAL LABORATORIES, INC. • CHICAGO 10



YOU

..ARE THE JUDGE..



..AND JURY..



It is in the physician's office—at the patient's bedside—in the hospital—that the worth of pharmaceutical preparation is evaluated; that claims and promises are balanced against performance.

The many members of the medical profession—and they comprise a significant percentage of doctors in the United States—who have through the years used and prescribed U. S. Standard Products, have come to know and appreciate their unvarying dependability; their practical usefulness and economy; the conservatively fresh and unusual approach to therapeutic problems.

Avoiding exploitation of the merely "new" or "different," each research advance solidly buttressed by clinical or rational experimental evidence, U. S. Standard Products embody the best of the new and the traditional to provide the physician with the type of medication he has found effective in clinical practice.

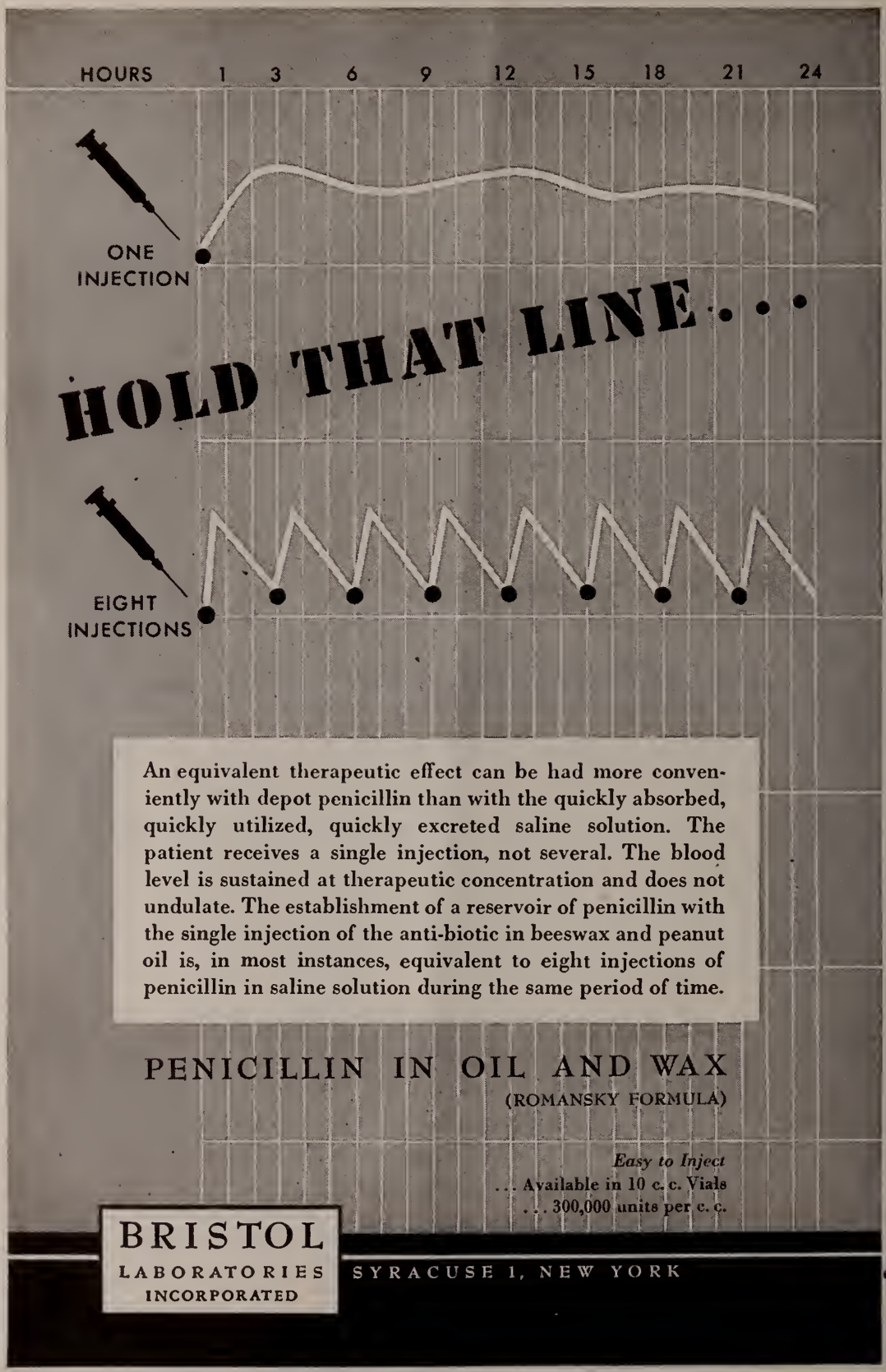
OUTSTANDING U. S. STANDARD BIOLOGICALS:

Diphtheria Toxoid	•	**Smallpox Vaccine**
Tetanus Antitoxin	•	**Typhoid Vaccine**

Also a representative list of glandular products and pharmaceuticals.

U. S. STANDARD PRODUCTS CO.

WOODWORTH, WISCONSIN, U. S. A.



An equivalent therapeutic effect can be had more conveniently with depot penicillin than with the quickly absorbed, quickly utilized, quickly excreted saline solution. The patient receives a single injection, not several. The blood level is sustained at therapeutic concentration and does not undulate. The establishment of a reservoir of penicillin with the single injection of the anti-biotic in beeswax and peanut oil is, in most instances, equivalent to eight injections of penicillin in saline solution during the same period of time.

PENICILLIN IN OIL AND WAX
(ROMANSKY FORMULA)

Easy to Inject
. . . Available in 10 c. c. Vials
. . . 300,000 units per c. c.

BRISTOL
LABORATORIES
INCORPORATED
SYRACUSE 1, NEW YORK



Tissue Stimulation To Promote Healing

IN slow-healing wounds, chronic ulcers, burns, suppurating wounds, or open amputation stumps, cod-liver oil has been shown to possess the property of stimulating the growth of granulations and of epithelium.[1,2,3] Bacteriologic studies have shown that when infection is present, cod-liver oil lowers the vitality of pus-forming organisms.[1]

Morruguent Ointment, containing cod-liver-oil concentrate, presents a 25 per cent greater content of the unsaponifiable fraction than is contained in cod-liver oil U.S.P., and none of the objectionable fish-oil odor. The response to Morruguent is quickly apparent. Wound odor, if present, disappears. Necrotic material is liquefied, granulation tissue fills the lesion, and epithelization is observed early after treatment is begun. Healing takes place with a minimum of surface disfiguration.

Morumide Ointment, 10 per cent sulfanilamide in a suitable base incorporating cod-liver-oil concentrate, adds the bactericidal and bacteriostatic efficacy of sulfanilamide to the cod-liver-oil effect.

---

[1] Iost, V. J., and Kochergin, J. G.: Cod-Liver-Oil Treatment of Wounds, J.A.M.A. 106:586 (Feb. 15) 1936.

[2] Hardin, P. C.: Cod-Liver-Oil Therapy of Wounds and Burns, South.Surgeon 10:301 (May) 1941.

[3] Aldrich, R. H.: Cod-Liver-Oil Ointment in Surgery; 8-Year Study, Indust.Med. 11:153 (April) 1942.

MORRUGUENT & MORUMIDE



Morruguent and Morumide Ointments are supplied in 2-oz. tubes and in 1-lb. jars.

THE S. E. MASSENGILL COMPANY

BRISTOL, TENN.-VA.

NEW YORK • SAN FRANCISCO • KANSAS CITY

SE Mco



full recovery through a miracle of distribution

THIS LITTLE GIRL will be up tomorrow. Ten days ago she was suddenly stricken with streptococcic septicemia. Her physician needed penicillin—plenty of it, right away. Fortunately, the drug store had a sufficient quantity in stock to start treatment. The pharmacist hurriedly called his service wholesaler, and an adequate supply of Penicillin, Lilly, was promptly available.

In over two hundred wholesale houses, in every corner of the nation, Penicillin, Lilly, is kept properly stored, ready for immediate delivery. Quick availability is vitally important in cases of desperate illness. Specify Penicillin, Lilly, through your favorite prescription pharmacy.

ELI LILLY AND COMPANY • INDIANAPOLIS 6, INDIANA, U. S. A.

Iletin (Insulin, Lilly)



Years of research and experience in the manufacture of large lots of Iletin (Insulin, Lilly) have resulted in the development of methods of preparation and standardization that insure purity, stability, and constant unitage. Iletin (Insulin, Lilly) and its modifications are supplied in 10-cc. vials designated as:

Iletin (Insulin, Lilly), U-20, U-40, U-80, and U-100, containing 20, 40, 80, and 100 units per cc., respectively.

Iletin (Insulin, Lilly) made from zinc-Insulin crystals, U-20, U-40, and U-80, containing 20, 40, and 80 units per cc., respectively.

Protamine, Zinc & Iletin (Insulin, Lilly), containing 400 and 800 units, labeled 40 and 80 units per cc., respectively.

ELI LILLY AND COMPANY
INDIANAPOLIS 6, INDIANA, U.S.A.

ILLUSTRATION BY HAROLD ANDERSON

Your ticket, Doctor

NO NEED for the doctor to be embarrassed over his failure to remember his ticket. Every minute is measured these days, and during the last hour at the office there were many things to be done. Despite the temporary hardship which his absence will impose on his patients, the few days required to attend the state medical meeting, where opinions can be exchanged with mutual respect and confidence, will be time well spent.

The tempo of medical progress, always rapid, has been accelerated to a marked degree during the last few years. New discoveries and developments have been most revealing.In the practice of medicine, the old is never good enough if the new is better. Medical meetings are essential to better understanding, better health, and better medical care. The physician owes it to himself and to his patients to attend whenever possible.

A picture of The Good Samaritan provided the inspiration that



eventually led to the founding of Eli Lilly and Company

The Illinois Medical Journal

June, 1946

VOL. 89, NO. 6

Official Journal of the Illinois State Medical Society

EDITOR — Harold M. Camp. EDITORIAL BOARD — James H. Hutton, Chairman, Frederick H. Falls, Josiah J. Moore, Edwin M. Miller, Chauncey C. Maher, Harry S. Gradle, Harry Culver, Walter Stevenson, Raymond W. McNealy.

Editorials

MEET THE NEW OFFICERS

Robert S. Berghoff who has acted as President-elect of the Illinois State Medical Society for the past two years, was inducted into the office of President at the closing session of the House of Delegates on Thursday, May 16th. Everett P. Coleman, the retiring president, with appropriate statements, handed the gavel to Doctor Berghoff and after a short statement from the new president relative to his desire to carry on efficiently during the coming year, he closed the session of the House.

Doctor Berghoff was graduated from the St. Louis University Medical School in 1913, and served as intern at St. John's Hospital, St. Louis. For several years he devoted much time to the subject of tuberculosis, and had a number of important assignments as instructor in medicine and tuberculosis at Rush Medical College and as a staff member at Cook County Hospital. He was a Major in the medical corps during the first World War, and following his return from service, began his intensive training in cardiology, both in this country and in European centers. For a number of years he has been Clinical Professor of Medicine at Loyola University Medical School, Chief of Staff at Mercy Hospital, and through his efforts, the Heart Clinic at that hospital which has been operating over a period of years under his supervision, was established.

He has been a member of the Educational Committee of the Illinois State Medical Society, Chairman of the Scientific Service and the Post Graduate Committees for years, is always interested in these activities and has been largely responsible for their successful operation. In addition to his membership in the state society, Fellowship in the A.M.A., etc., he is certified by the American Board of Internal Medicine and is a member of the American Heart Association.

Irving H. Neece, Decatur, was chosen as President-elect by the House of Delegates. He also graduated from St. Louis University Medical School in 1911, and following his internship, prepared himself for the specialty of Urology, which type of work he has done during his years of practice in Decatur. For more than 20 years he has been a member of the Council of the Illinois State Medical Society from the Seventh District, and for one year, the chairman of the Council, which position he filled most satisfactorily.

Doctor Neece has been a member of a number of important committees both within the Council, and of those assigned for state wide work. He has always done his work as would be expected of one so interested in the problems of modern medicine. For a number of years he has been chairman of the Committee on Venereal Disease Control and has acted in an advisory capacity to the state division under the Department of Public Health, and has attended many conferences at the call of the Director or his personnel. Doctor Neece is well qualified for

the additional trust and responsibility which will go with this important office.

Chauncey C. Maher, who was elected first vice-president, was graduated from the University of Illinois in 1923, had an internship at Cook County Hospital 1923-25, and soon thereafter became a member of the staff of Cook County Hospital, and Associate Professor of Medicine at Northwestern University Medical School. He was certified by the American Board of Internal Medicine, Cardiovascular Disease, and his specialty has been Cardiology. He has been a member of the Illinois State Medical Society, a Fellow of the American Medical Association, and likewise is a member of a number of other special societies. Doctor Maher was General Chairman of the Committee on Arrangements for the 1945 annual meeting which was cancelled a year ago, and again acted in that capacity for our 1946 annual meeting. He held this position most creditably and carried out the policies which were approved by the Council, giving you this year a streamlined modern meeting appreciated by all in attendance.

John P. O'Neil, Chicago, was elected to the office of second Vice-President by the House of Delegates. Doctor O'Neil was graduated from the University of Illinois College of Medicine in 1906, and following his internship, prepared himself for the practice of Urology. He is a member of the American Urological Association in addition to holding membership in the Chicago Medical Society, the Illinois State Medical Society, and Fellowship in the American Medical Association.

The complete list of new officers, Councilors, and members of standing committees appears elsewhere in this issue of the Illinois Medical Journal.

A REPORT ON THE 1946 ANNUAL MEETING

The 1946 annual meeting of the Illinois State Medical Society held at the Palmer House, Chi-

ILLINOIS STATE MEDICAL SOCIETY

GENERAL OFFICERS, 1946-1947

PRESIDENT.....Robert S. Berghoff, Chicago
PRESIDENT-ELECT.....Irving H. Neece, Decatur
1ST VICE-PRESIDENT....Chauncey C. Maher, Chicago
2ND VICE-PRESIDENT.....John P. O'Neil, Chicago
SECRETARY-TREASURER...Harold M. Camp, Monmouth

THE COUNCIL

L. J. Hughes	1st	District, Elgin	1947
Edgar C. Cook	2nd	District, Mendota	1947
Percy E. Hopkins	3rd	District, Chicago	1947
Oscar Hawkinson	3rd	District, Oak Park	1948
Harry M. Hedge	3rd	District, Chicago	1949
Wade C. Harker	3rd	District, Chicago	1947
Leo P. A. Sweeney	3rd	District, Chicago	1948
H. Prather Saunders	3rd	District, Chicago	1949
Charles P. Blair	4th	District, Monmouth	1949
Ralph P. Peairs	5th	District, Normal	1949
Walter Stevenson	6th	District, Quincy	1948
Charles H. Hulick	7th	District, Shelbyville	1949
Harlan English	8th	District, Danville	1949
Charles O. Lane	9th	District, W. Frankfort	1948
G. C. Otrich	10th	District, Belleville	1948
Edwin S. Hamilton	11th	District, Kankakee	1947
Everett P. Coleman	At	Large, Canton	1949

Chairman of the Council.....Walter Stevenson

ILLINOIS MEDICAL JOURNAL

Harold M. Camp, Monmouth.....Editor
L. E. Malley, Chicago....Managing Editor & Business Mgr.
Percy E. Hopkins, Chicago....Chairman, Journal Committee
Harry J. Stewart, Oak Park....Secretary, Journal Committee
James H. Hutton, Chicago.....Chairman, Editorial Board
Business Office....30 North Michigan Ave., Chicago 2
Editorial Office.....Monmouth, Illinois

GENERAL COUNSEL

Edward W. Rawlins.....77 West Washington St., Chicago

MEDICAL SERVICE & PUBLIC RELATIONS

James H. Hutton, Chairman...30 N. Michigan Ave., Chicago
John W. Neal, Executive Sec...30 N. Michigan Ave., Chicago

PERMANENT HISTORIAN

David J. Davis.....721 Elmwood Ave., Wilmette

COMMITTEE ON PROFESSIONAL DEMEANOR

Oscar Hawkinson, Chairman..1011 Lake Street, Oak Park

COMMITTEE ON MEDICAL EDUCATION & HOSPITALS

Willard O. Thompson, Chm...700 N. Michigan Ave., Chicago

COMMITTEE ON MEDICAL BENEVOLENCE

Lucius Cole, Chairman.....715 Lake Street, Oak Park

PERMANENT COMMITTEE ON ARCHIVES

D. D. Monroe, Chairman.....Alton
C. Ellsworth Black, Secretary.....Jacksonville
E. H. Weld.....Rockford

EDUCATIONAL COMMITTEE

James H. Hutton, Chairman..30 N. Michigan Ave., Chicago
Charles P. Blair, Vice-Chairman.....Monmouth
Miss Jean McArthur, Sec.....30 N. Michigan Ave., Chicago

SCIENTIFIC SERVICE COMMITTEE

Robert S. Berghoff, Chairman..30 N. Michigan Ave., Chicago
Leo P. A. Sweeney, Vice-Chm...9715 Winston Ave., Chicago

POST GRADUATE COMMITTEE

Robert S. Berghoff, Chairman..30 N. Michigan Ave., Chicago
Geo. A. Hellmuth, Vice-Chm.....1180 E. 63rd St., Chicago

Outside of editorial or allied views or statements that are the authoritative actions of the Illinois State Medical Society, the organization denies responsibility for opinions and statements published in the ILLINOIS MEDICAL JOURNAL. Views expressed by the various authors and views set forth in various departments in the JOURNAL represent the views of the writers.

State Society will pay no bills for legal services except those contracted by the Committee. Notify the Chairman at once. Do not employ attorneys.

Send advertising copy, cuts and all communications relating to advertising to ILLINOIS MEDICAL JOURNAL, 30 N. Michigan Avenue, Chicago.

Original articles and membership correspondence to Dr. Harold M. Camp, Monmouth, Ill.

Society proceedings and news items and changes in the mailing list to Managing Editor, 30 N. Michigan Ave., Chicago 2, Illinois.

Subscription price of this JOURNAL to persons not members of the Illinois State Medical Society is $3.00 per year, in advance, postage prepaid, for the United States, Cuba, Porto Rico, Phiiippine Islands, Hawaiian Islands and Mexico. $4.00 per year for all foreign countries included in the postal union. Canada, $3.50. Single current copies, 50 cents.

cago, May 14-16, has come to a successful close. This meeting epitomized the accumulated wealth of two years in medicine. The 1945 annual meeting was cancelled by the Office of Defense Transportation, so consequently the officers, committees, and the general chairman appointed to carry on this meeting, held over and offered you a streamlined meeting conducted along new lines.

Comment is requested as to whether or not the attending physician prefers three days of general sessions with papers presented before the entire group by members of each section, or whether the return to section meetings is desired. It is hoped that many of the men who attended will write in to the secretary's office with suggestions for our 1947 meeting. As those who attended know, the Section on Radiology held a separate meeting on Tuesday afternoon, and the Section on Eye, Ear, Nose and Throat met all day Tuesday and Wednesday.

The registration this year indicated a statewide interest; 2856 professional registrations were recorded, 407 exhibitors and 358 members of the Women's Auxiliary and guests. The completed list of professional registrations is to be mimeographed and sent to all exhibitors who participated in the meeting.

Physicians from all over the world registered with us. Dr. T. C. Routley, secretary of the Canadian Medical Association, was present at the sessions Wednesday and was a guest at our annual dinner. Dr. Harrison H. Shoulders, President-elect of the American Medical Association, of Nashville, Tennessee, came in as a guest, attended some of the scientific sessions, met with our Council, and was seated at the speakers' table at our dinner. Three foreign registrations came to light as we checked the registration cards: one physician from Paris, France, another from Geneva, Switzerland, and the third from Lima, Peru, in all probability students in Chicago. Physicians from some ten or twelve other states also registered with us.

We wish to call your attention to the excellent work of Dr. John A. Mart, Chicago, in charge of the scientific exhibits for the first time this year. Doctor Mart gave an excellent account of himself, and the exhibits which appeared in the Red Lacquer Room were adjudged outstanding. This work will be carried on by Doctor Mart again next year, and we feel sure that these exhibits will develop into one of the outstanding features of our meetings under his capable leadership.

One of the reference committees appointed by the President, in reporting to the House of Delegates on the scientific work, highly commended both the technical and the scientific exhibits, and made pertinent recommendations for the arrangements for the 1947 meeting. These recommendations were approved by the House of Delegates and will be put into effect when arrangements are being made for the next annual meeting.

The 1946 annual meeting when judged by the usual standards, was veritably an outstanding meeting.

DR. H. PRATHER SAUNDERS JOINS AMERICAN COLLEGE OF SURGEONS STAFF AS ASSISTANT DIRECTOR

Dr. H. Prather Saunders joined the staff of the American College of Surgeons, Chicago, March 16, and was appointed Assistant Director.

Dr. Saunders was on active duty in the Medical Corps of the United States Navy from April, 1942, to March, 1946, during which time he spent 21 months in the Pacific as Senior Medical Officer of a destroyer tender which was equipped with a sick bay equivalent to a 60-bed hospital, furnishing surgical and medical service to its own crew and also the personnel of smaller ships such as destroyers and destroyer escorts.

Dr. Saunders was Secretary of the Chicago Medical Society in 1939 and 1940 and was President in 1942. He was First Vice-President of the Illinois State Medical Society in 1941. He has been a member of the attending surgical staff of Ravenswood Hospital since 1930 and was president of the staff in 1936 and chairman of the tumor clinic from 1937 to 1942. He was born in Kentucky, received an A.B. degree and a two-year Certificate in Medicine from the University of Missouri in 1917, and graduated with an M.D. degree from the University of Illinois in 1919, serving as instructor in physiology at the latter school simultaneously with an internship and residency at Lakeview Hospital from 1919 to 1921. He is a Fellow of the American College of Surgeons and a member of Phi Beta Phi and Alpha Omega Alpha. He was elected a councilor for the 3rd District, Illinois State Medical Society, at the recent annual meeting held May 14-16, 1946.

IN MEMORIAM

JAMES FULTON PERCY 1864-1946

James F. Percy, M.D., President of the Illinois State Medical Society in 1907, died in Los Angeles on April 26, 1946. Born in Bloomfield, New Jersey, Doctor Percy was graduated from Bellevue Hospital Medical College, New York, in 1886. For many years he practiced at Galesburg, Illinois, doing surgical work exclusively. He entered the medical corps of the U. S. Army in 1917, becoming Chief of Medical Staff, U. S. Army Base Hospital, Camp Kearney, where he remained on duty for two years. He later became a Lieutenant Colonel in the Medical Reserve Corps.

Soon after the end of World War I, Doctor Percy relocated in Los Angeles where he remained in practice until forced to retire because of failing health. He was a member of the first Council of the Illinois State Medical Society when the Constitution and By-Laws were completely rewritten in 1902-1903, remaining on the Council until elected as President-elect in 1906. For a number of years he was secretary of the Council, which position he filled most satisfactorily, and during this long period, he participated freely in the affairs of his state medical society.

Doctor Percy was a member of many surgical societies and was attending surgeon to a number of Los Angeles hospitals, being chief surgeon, cancer service, at the Los Angeles County Hospital. He was also president of a number of societies in Los Angeles including the Los Angeles Surgical Society, Los Angeles Cancer Society, and was past president of the Western Surgical Association.

During his long residence in the west, his interest in the Illinois State Medical Society never waned. He was a frequent visitor at the annual meetings. Many members of this society will long remember Doctor Percy for his outstanding work in cancer surgery as well as for his continued interest in the Society for which he had done so much over a period of nearly half a century.

1946-1947 OFFICERS OF THE ILLINOIS STATE MEDICAL SOCIETY

President: Robert S. Berghoff, 30 N. Michigan Avenue, Chicago 2

President-Elect: Irving H. Neece, Decatur

1st Vice-President: Chauncey C. Maher, 6 North Michigan Ave., Chicago

2nd Vice-President: John P. O'Neil, 30 North Michigan Avenue, Chicago 2

Secretary-Treasurer: Harold M. Camp, Monmouth

THE COUNCIL

1st District: L. J. Hughes, Elgin

2nd District: Edgar C. Cook, Mendota

3rd District: Percy E. Hopkins, 800 West 78th Street, Chicago

Oscar Hawkinson, 1011 Lake Street, Oak Park

Harry M. Hedge, 30 North Michigan Avenue, Chicago

Wade C. Harker, 4458 Madison Street, Chicago

Leo P. A. Sweeney, 9715 Winston Avenue, Chicago

H. Prather Saunders, 40 East Erie Street, Chicago

4th District: Charles P. Blair, Monmouth

5th District: Ralph P. Pearis, Normal

6th District: Walter Stevenson, Quincy

7th District: Charles H. Hulick, Shelbyville

8th District: Harlan English, Danville

9th District: Charles O. Lane, West Frankfort

10th District: G. C. Otrich, Belleville

11th District: E. S. Hamilton, Kankakee

Councilor-at-large

Everett P. Coleman, Canton

Chairman of the Council

Walter Stevenson, Quincy

Medical Economics

The Medical Economics Committee — Chauncey C. Maher, Chmn., 6 North Michigan Avenue, Chicago, Edwin S. Hamilton, V. Thomas Austin, Emmet B. Bay, Jay McDonald Milligan, Jacob M. Mora, George Halperin, Marie Wessels, Thomas C. Browning, Roland R. Cross, Milton E. Bitter, Edwin F. Hirsch, Ford Hick, Lt. Col. MC, William J. Bryan, John R. Vonachen.

THE DOCTOR AND CERTAIN RESPONSIBILITIES IN INDUSTRIAL MEDICINE AND SURGERY

The practice of the surgeon whose work is largely concerned with industry has as one of its requirements an orderly routine in handling reports and seemingly burdensome correspondence. It happens, however, that those engaged entirely in industrial work serve only a small portion of those who are injured at work or who suffer of occupational disease. The thousands of small industrial plants and other concerns who operate under the Compensation Act are the source of numerous accidents among workmen and in the case of some of these there is a notable prevalence of occupational diseases. Many of these patients are referred by the employer to general practitioners or specialists not engaged primarily in industrial work and it is among these groups that there may be a desire for a thorough understanding of the doctor's responsibilities in such work.

The responsibilities which will be referred to arise by virtue of enactment since 1914 of Workmens Compensation Acts by all of our states. These Acts are quite uniform in their essential features and all are modeled upon the English system much the same as our system of Common Law derived from that of the English. They embody three main aims: 1. To Prevent, 2. To Restore, 3. To Compensate. The first is largely an educational endeavor and a problem of both preventative medicine and engineering. The second is solely in the hands of the medical profession and as far as methods and application of treatment are concerned there need be no line of demarcation between the indications for treatment in industrial work than in any other comparable situation. The responsibilities of the medical profession in carrying out this second aim has been prompt and efficient and medical knowledge has contributed to the rapid strides in carrying out the first aim. Finally the third aim appears at first sight to be none of our concern but when examined further the need for a change of that viewpoint becomes obvious.

The compensatory function of the Compensation Act deals with the amount of compensation which should be paid for temporary and permanent disability, and for death benefits. No payment can be made in a routine manner for losses sustained until it has been certified by the treating doctor that a condition of occupational origin is suffered and that the patient is disabled. An accurate appraisal of this situation entails knowledge of various facts which in many cases are obtainable only from the doctor, and his report which to him may seem a nuisance, constitutes one of the chief essentials to making disability payments. It does not suffice to say that an index finger has been fractured. The history of the accident is essential and in that respect a claim adjuster must know - - where, when and how. Pre-existing ailments can be aggravated and activated and in those cases only information regarding the past history can clarify the element of responsibility. The exact nature and extent of the injury must be explained in order to qualify the patient for disability payments and as well the nature of treatment rendered must be sufficiently described to show compliance with the law, which requires that adequate and necessary medical care be rendered. Finally, some idea must be given in the preliminary report as

to whether or not there will be permanent disability in order that adequate reserves can be established for payment of the loss at a proper time. It is information of the nature just mentioned that is sought when the average type of surgeon's report blank is presented for execution and if the amount of necessary information be compared to the number of questions asked in the acceptable type of report form it can readily be concluded that these forms are not unnecessarily burdensome but that they are actually concise.

The task is not always complete when the patient has been given the necessary treatment and an initial report has been forwarded. Supplemental reports must often follow to advise of complications or to correct previous estimates of disability if the course of the condition has been other than at first expected. A final report is also required and although this too should be concise and simple, certain features must be included if the compensatory phase of the law is expected to function properly. The final report has as its essential elements the date when the temporary disability ceased and the nature and extent of permanent disability, if any. A study of the compensation acts will reveal that the information upon which decisions are made, referable to the extent of permanent disability must be provided by the medical profession. In the Illinois act there is no definite schedule which provides information as to the percentage of loss of a limb which has been injured in some specific degree or which lists certain conditions as being permanently disabling. The answers to these questions must be derived from the judgment and experience of the treating surgeon and medical examiners and if appraisals are to be correct an adequate amount of experience must be acquired and the necessary judgment exercised. Sources of information as to percentages of disability include texts on that subject, disability schedules of states in which unification of awards has been undertaken and finally by contact with examiners who have knowledge of prevalent practices in that field.

The responsibility of the doctor does not always end when his final estimate of disability has been given in writing. As we all know it may be necessary to present testimony before an industrial board or commission and if the law is to function properly this must be done willingly and with the greatest possible amount of accuracy.

The responsibilities here mentioned are largely inescapable and the fact that they are somewhat complex should bring to light the economic importance of the industrial portion of medical practice. On the side of the medical profession all of the responsibilities entailed should be assumed when treatment of any specific case is undertaken and on the side of industry and those who represent it there must be the realization that the doctor's task is often a burdensome one and that adequate compensation must be provided for the work performed outside of the operating and treatment rooms.

THOUSAND DOLLAR AWARD FOR MEDICAL STUDENTS

A competition open to undergraduate medical students, has recently been announced. Held annually to encourage medical students to acquire further knowledge of various fields of endocrinology, the subject of this year's thousand dollar prize contest will be, "The Role of Hormones in Sterility." Three judges, each prominent in the field of endocrinology, will make the selections, and the award is sponsored by Schering Corporation of Bloomfield, New Jersey, manufacturers of endocrine and pharmaceutical products for the medical profession. For the best thesis submitted on the subject, an award of five hundred dollars will be given. For the second and third best papers, awards of three hundred and two hundred dollars, respectively, will be given. The Schering Award Committee is again receiving an enthusiastic response from medical students in every section of the United States and Canada.

Correspondence

FIFTY YEAR CLUB LUNCHEON

The Fifty Year Club of the state medical society held its noonday luncheon in the Palmer House, Wednesday, May 15. The following physicians were present:

F. A. Turner, Rockford
Walter C. Blaine, Lincoln
Earl C. White, W. Brooklyn
Marion L. White, Dixon
Kate E. Peckhardt, Chicago
G. M. Blech, Chicago
W. M. Burroughs, St. Charles
U. G. Darling, Chicago
Edward H. Ochsner, Chicago
Ralph H. Wheeler, Chicago
Frederick Cleveland Test, Chicago
David Lieberthal, Chicago
Joseph Prendergast, Chicago
Joseph DeSilva, Rock Island
H. O. Munson, Rushville
V. A. Latham, Chicago
Edward D. Howland, Chicago
Gordon G. Burdick, Chicago
Isaac A. Abt, Chicago
James S. Mason, Urbana
Bertha Van Hoosen, Chicago
J. A. Brown, Kankakee
S. Horwitz, Peoria
Samuel E. Munson, Springfield
P. B. Kionka, Melrose Park
C. S. Bacon, Chicago
E. Luther Stevens, Bartlett
Walter B. Metcalf, Chicago
W. R. Roberts, Cissna
Berton W. Hole, Springfield
George Allen Dicus, Streator
A. M. Barothy, Chicago
Victor A. McClanahan, Aledo
Alvin V. Cole, Chicago
Walter C. Blaine, Tuscola
George Cremeens, Springerton
Perry H. Stoops, Chicago
Elizabeth R. Miner, Macomb
Earl Beck, Chicago
Effie L. Lobdell, Chicago
S. C. Stanton, Chicago

Several members delivered short addresses or told some humorous story, and the meeting was thoroughly enjoyed by all present. We were also honored by having Dr. H. H. Shoulders, president elect of the American Medical Association, for a short visit and an interesting address. A splendid dinner was served, for which I am instructed to express our thanks to the Illinois State Medical Society.

Signed: Andy Hall, M. D.
Chairman

NEUROPSYCHIATRY TRAINING OFFERED

The Department of Public Welfare, State of Illinois, offers a one, two and three year training as residents in neuropsychiatry and its allied fields. The course is designed to fulfill the requirements of the American Psychiatric Association and to prepare the resident for examination to become a diplomate of the American Board of Psychiatry and Neurology. The regular positions in the state hospitals will be filled from the graduates of this course whenever possible.

The outstanding features of these residencies will be the nine months training in one of the approved state hospitals and the three months training in the Illinois Neuropsychiatric Institute in cooperation with all the class A medical schools in Chicago. Another outstanding feature will be service at the Veterans' Rehabilitation Center, the Psychopathic Hospital of Cook

(Continued on page 280)

State Department of Public Health

SANITARY ENGINEERING — AN ALLY OF MEDICINE

Sanitary engineering, a subject that involves technical information and procedures far afield from that of medicine, is, nevertheless, one of our most important factors in the control of many communicable diseases. The physician may see a case of typhoid fever, dysentery, scarlet fever, diphtheria, undulant fever or, less commonly, malaria or plague. He is concerned primarily with the treatment of that individual case and the protection of other members of the family. The sanitary engineer on the other hand is interested in the origin of that infection. Was it due to contaminated water, milk or food? Were insect vectors or intermediate hosts involved? What does that case imply with regard to sanitation and its effect upon the community? The answers to these questions are of utmost importance for in many instances the occurrence of even one case may mean that the health of the entire community is at stake and not uncommonly it is the technical skill of the sanitary engineer, not the physician, that will prevent the extensive repetition of that one case.

The interests of sanitary engineering, of course, are not confined to the relation of sanitation to the individual already infected. It is true that a case of typhoid often calls for immediate correction of sanitary defects. This is an unfortunate circumstance which should not have occurred and *that* principally is the aim of sanitary engineering — the constant promotion of good sanitation which will provide a healthful total environment in rural as well as urban areas, at play as well as at home and work. This alone, with all due respect to preventive medical procedures and other public health practices, will do much to reduce the prevalence of diseases due to filth and insects. Mosquito and other insect control, deratization, milk pasteurization, proper sewage disposal, safe water supply are but a few examples of sanitary engineering procedures which play a major role in disease control. As to evaluating results, we have only to compare the present and past in terms of a few diseases: yellow fever, malaria, plague, typhoid fever and cholera. The present success in the conquest of each has been largely a matter of good sanitation.

The Illinois State Board of Health, created in 1877, early recognized the importance of sanitation particularly with respect to stream pollution. This responsibility was shared with other State agencies such as the University of Illinois or was fulfilled with the temporary assistance of other outside individuals or agencies. It was not until 1915 that the need of a full-time Bureau of Sanitary Engineering became so apparent that the legislature appropriated funds for its establishment under the State Board of Health. Provision was made for a chief engineer, and assistant engineer for field studies, an assistant engineer for the water and sewage laboratory and a stenographer. Thus with a staff of three engineers and one stenographer, Illinois began a long needed systematic sanitary engineering program.

Today that Bureau, now known as the Division of Sanitary Engineering, is one of the most active and largest Divisions of the State Department of Public Health. Since 1915 its personnel has increased from a total of four to a staff of

14 engineers, 6 milk sanitarians, 1 nurse, 12 laboratory workers, 1 chemist, 2 special investigators and 13 clerical workers. In addition, 8 sanitary engineers and 2 sanitarians are assigned to district offices of the Department.

The development of the present staff has been a gradual process occasioned by the perfection of new procedures, advancing scientific knowledge, added responsibilities as well as an increasing number of requests for services and advice. While at the very first water supplies, sewage disposal and stream pollution were the major interests of the Bureau, the program today includes other phases of sanitation which are of equal importance as safeguards in modern living.

Many of these activities are carried on in cooperation with other Divisions of the Department as well as with official local health organizations. In nearly all instances, however, the major responsibility belongs to the Division of Sanitary Engineering.

Among its chief interests, the Division investigates and approves proposed new or improved public water supply systems. Preliminary inspection of plans and final approval following construction before operation begins are important items in the program. Existing public supplies are constantly checked by plant visits and laboratory procedures in order to insure the maintenance of safe operation. The Division sponsors annual conferences and cooperates with the University of Illinois in offering yearly short courses for the operators of water plants. Thus the guardians of our water supplies are informed of new and more efficient developments in plant operation.

Inspection of water supplies for common carriers, approval of private supplies in F.H.A-financed homes, inspection of school wells and cisterns and advice to commercial companies and home owners concerning the construction of private wells are additional functions of the Division which help materially to accomplish safe water supplies throughout the State.

Closely related to water supply is the matter of sewage disposal. The activities of the Division with respect to public and private sewage disposal systems parallels the program described for water supplies. As to stream pollution created by the disposal of sewage as well as industrial wastes into surface waters, the Division renders all technical services for the State Sanitary Water Board which is composed of the Directors of the State Departments of Public Health, Agriculture and Public Works and Buildings, and a representative of manufacturing interests appointed by the Governor. The Chief Sanitary Engineer serves as technical secretary to the Board. The purpose of this Board generally is to investigate, devise ways and means of controlling and to enforce the prevention of any stream pollution that is detrimental to public health, or to the health of animals, fish or aquatic life or detrimental to the practicable use of waters for recreational purposes.

Milk, the safety of which is equal in importance to that of water, is the basis of another extensive activity of the Division. The inspection and approval of milk pasteurization plants and the enforcement of the Illinois State Grade A Law are two of its legal responsibilities. While the correction of defects is made mandatory, prior to issuance of necessary certificates to dairies and pasteurization plants, much of the accomplishments are achieved through the educational program directed toward the owners and operators during inspection visits. In this field reliance is placed on laboratory analyses of milk and milk products as well as upon the actual findings in the plants during operation.

The licensing of maternity hospitals is the direct responsibility of the Division of Maternal and Child Hygiene but to the Division of Sanitary Engineering there has been assigned the repsonsibility of inspecting sanitary installations in these hospitals and of reviewing plans and specifications with regard to new installations. A closely related activity, the licensing of nursing homes which is based largely on sanitation requirements, is a more direct function of the latter Division involving the review of applications and numerous inspections.

Although malaria is not widely prevalent in Illinois, a constant threat exists because of the presence of Anopheline mosquitoes in many of our waters. During the war the Division assisted the U. S. Public Health Service in a mosquito control program and in all probability the Division will continue to promote this program and give advisory service to district proj-

ccts made possible by the State's Mosquito Abatement Law.

In addition to its year-round programs, the Division stands in readiness to fulfill its responsibilities as outlined in the State *Disaster and Emergency Plan* prepared by the State Military and Naval Department in 1944. The serious health hazards created by floods and tornadoes require well trained personnel and technical equipment in order to restore safe water supplies and provide proper sewage disposal and housing as quickly as possible. These functions belong primarily to the Division's engineers.

Although the multiplicity of the foregoing duties would seem to be enough for one Division, they do not represent all of them. The investigation of water-borne diseases and food poisoning outbreaks, supervision of swimming pools and bathing places, sanitary inspection of schools and State institutions, inspection of inns and boarding houses, investigation of insecticides and bactericides, the promotion of general sanitation in homes and communities, advice as to garbage disposal systems, eradication of rats, insect control, sanitary barn construction, food sanitation, municipal ordinances — all of these are included in the general program of the Division. Much of the educational work is accomplished through personal contact made by members of the Division or its field representatives but liberal use is made also of pamphlets, films and exhibits dealing with the technical as well as general aspects of sanitation.

It can be seen, therefore, that the doctor and the sanitary engineer share much in common as to an interest in the cause and spread of many of our communicable diseases. From this common foundation the one pursues the study of anatomy, physiology, symptoms and treatment while the other becomes involved with mathematics, physics and structural design. But given a communicable disease in which the cause is traced to poor sanitary facilities, the interests of both once more converge in an effort to protect the health of the community as well as the individual. In this respect the sanitary engineer is closely allied to the doctor of medicine.

TUBERCULOSIS TAKES 315,000 LIVES IN FRANCE DURING WAR YEARS

The Paris correspondant of *The Journal of the American Medical Association* reports in its March 23 issue that there were 315,000 deaths from tuberculosis in France during the war period, September 1939 to May 1945.

The correspondent, who derived his figures from the Bulletin of General Statistics of France, says:

Children up to 2 years of age were severely stricken. An increase of 21 per cent for adolescents from 15 to 19 and 88.5 per cent for men from 25 to 29 has been observed. The author [of the Bulletin] concludes that this increase among men is due to their greater reaction to the restrictions and the hardships of life during the war and the occupation.

Continuing, *The Journal* correspondent presents a comparative study of the tuberculosis mortality in the past two wars:

During the war of 1914-1918 an increase of the tuberculosis death rate was noted. The death rate rose from 215 per hundred thousand inhabitants in 1910 to 278 in 1918, an increase of 29.3 per cent. During the war of 1939-1945 and the occupation it attained 159 in 1941, the highest rate, as against 120 in 1936, which represents an increase of 32.5 per cent.

The practicing physician will do well to request routine laboratory examinations of the sputum of each of his patients with pulmonary symptoms. A number of these persons will be found to have tuberculosis. Most states provide free laboratory service for such tests. Herman E. Hilleboe, M.D. and Arthur W. Newitt, M.D. Jour.-Lancet, April, 1945.

Original Articles

PRESIDENT'S ADDRESS

EVERETT P. COLEMAN, M.D.
CANTON

We are living in a changing world. Progress in scientific medicine has advanced so rapidly in the past few years that it taxes the ingenuity of the trained scientific mind to keep abreast of it. In the same manner legislative and other affairs are also changing, so that the medical profession is having to protect itself on so many fronts that again the scientific doctor, accustomed to thinking only in terms of treating his patient, hardly knows which way to turn to defend himself.

A presidential address at this type of meeting is, in a sense, an accounting of stewardship, a report to you of ideas formulated during the past two years. A very few years ago your former presidents have given scientific papers on this occasion, containing their ideas along lines of scientific medicine which were instructive and which many times marked important advances in the science of medicine. Of more recent years these addresses have been based on legislative problems with which we were faced, and suggestions with reference to what might be done to overcome threats to the practice of medicine. All these have had an optimistic viewpoint.

On this occasion, were we living in normal times, we too should have an optimistic outlook and there are many reasons why this should be. For example, our country has just won the greatest war in the history of mankind. Our victorious armies are rapidly being disbanded. The country should, under normal circumstances, be returning to a period of post-war prosperity and the inhabitants should be in a position to enjoy more comforts and more happiness than they have had heretofore. Our returning medical veterans are coming back to their practices with their knowledge enhanced by great scientific advances in the past two years, especially along the line of chemical and biologic medicine. For example, there is the selective study of physiology. It is now known that radio-active iodine can be introduced into the circulation and will lodge in the thyroid gland, permitting a better and more thorough study of the function of that organ. This same method of studying physiology shows the possibility of adding to our information in reference to all the other organs of the body. Corresponding medical and surgical advances have been obtained, and there are prospects of more. Infections are being overcome. The recent advances of surgery in reference to radical resections of stomach and pancreas for cancer, is opening a new prospect for those interested in that type of work. Penetrating wounds of the eye are said to no longer require a loss of vision of that eye, or the loss of the eye itself, which I am told has been a routine procedure up until the last two or three years. With these, and many other examples in mind, a summation of the last two years of progress and the anticipation of things to come should bring an outlook of optimism. It should be based on the prospect of increasing length of life and health for the citizens of this country and of decreasing their illness, and an outlook of added happiness, which we know the medical profession alone is able to give the public in increasing volume. Instead of these things an attitude of caution seems indicated, based on the fact that civilization which has been built up by the efforts of comparatively few, who then carried the masses to vistas beyond their capacity to imagine or appreciate, may be voted down; it may even be lost by the ballot, which was

As read at the General Session of the Illinois State Medical Society, Wednesday, May 15, 1946, in Chicago.

originally used to free mankind.

Europe for generations has developed a spirit of aggressiveness and fostered the development of armies and national hatred. The result has been wars which now have practically wrecked civilization as it existed there. In the United States a spirit of internationalism has appeared with a tendency to foster class hatred until, with an impending return to the draft and to rationing, we well may be on the road to a governmental controlled economy, in which the individual may lose his identity until step by step we return to a life of regimentation which we have seen in Fascist Italy, Nazi Germany, and Soviet Russia. To a condition which, while necessary in the Army and Navy, has brought about so much resentment of that type of life among our returning veterans, that the system of voluntary enlistment seems to have fallen down almost entirely. This is due to the fact that our young men are only too anxious to get away from the regimentation which our present bureaucratic politicians are attempting to force upon the entire nation. Races which have lived in serfdom and semi-slavery for years may find that for themselves regimentation is a step forward; for the citizens of this country, however, it is a long journey backward and what will be lost under these conditions may well require generations to regain. The medical advances of this country have practically overcome and almost wiped out a great number of the major infections: tuberculosis, lues, typhoid fever, and many others. More recently traumatic surgery has taken a tremendous step forward due to its remarkably effective use in the hands of our military surgeons in the war. The treatment of peritonitis, hemorrhage, and shock has improved, and many surgical conditions which until recently caused death or permanent disability have responded to newer surgical methods. Such conditions as appendicitis, diseases of the thyroid gland, of the stomach, the gallbladder, the genitourinary organs, have been managed so well that persons suffering from these dread ailments are relatively safe when treated in the hands of the skilled American doctor of medicine.

Increased length of life brings the penalty of added afflictions and therefore old-age has been termed the most dreadful disease of all, but even the afflictions due to advancing years have been lightened by medical science. For example, great progress has been made in recent years in the treatment of fracture of the hip, and in prostatic disease, two of the commoner disabling conditions of the aged.

With all our accomplishments, we still have much to gain, new worlds to conquer. Although heart disease leads all others as the cause of death, perhaps a very potent factor in the production of the sclerotic arteries which tend to produce much of it, is that other prevalent disorder, chronic arthritis. These conditions added to cancer are now our major medical problems. The task is not simple and its solution needs the minds of the best medical men we can obtain. If we are to solve these problems we must as a profession be free to study, to learn, and to accomplish gains such as those which solved the problems of diphtheria, smallpox, and tuberculosis.

When we consider the troubles of the business or economic world and see how it is threatened by ill-advised attacks from politicians and ambitious agitators, and when we see the same agitators looking upon medicine with an envious eye, we must give thought to what might occur if their plans should succeed. We must think of what medicine is now doing, and what it will be able to accomplish in the next decade if allowed to carry on at its normal rate of progress, and then what medical stagnation would mean instead. We have as a profession several objectives. One is the care of the sick and here we have seen medical care develop until it is so complete and so readily available in this country that the public takes it for granted. The public here expects and receives a grade of medical care and a type of personal attention not available elsewhere in the world. Throughout this country any citizen is able to consult a doctor of medicine, is able to be hospitalized, and to receive scientific care from medical men who are interested in his welfare. He has a better chance of being restored to health than in any other country. All this at a price which compared to autos, furnaces, and house repairs, is comparatively cheap. In our care of the sick we have done a marvelous job. We have also developed along economic lines. In any form of society there are those who through inability to plan ahead or make provision for their future care, need in times of distress, help from the more prosperous members of their communities. Re-

gardless of their financial status those who are unable to care for themselves in the State of Illinois are assured of good medical care as shown by the amount spent for this purpose, by the Supervisors in their care of the indigent, the Old Age Pension System as applied under the control of the Illinois Public Aid Commission and with the assistance and advice of the Illinois State Medical Society. Those who receive Blind and Widow's pensions, and those who receive Aid to Dependent Children. In addition we have some very excellent laws which take care of industrial injuries and unemployment. Many of these are efficient and satisfactory in relieving the needs of the indigent or the substandard groups in every community. They are well worthwhile projects, and they are doing a great deal of good. Because these are serving a useful purpose, and because they are subject to some interesting political complications we now have government bureaus in Washington showing a desire to pension everyone, at least from a medical angle. The medical profession is not reactionary. To anyone who has given thought to the rapidly changing pace of advancing medical knowledge it is evident that the modern doctor has to be progressive. From the economic angle he is interested in Voluntary Prepayment Insurance Plans as advocated by the American Medical Association, and as now being introduced by your State Society. He is interested in furthering needed and proper health legislation, which will secure more hospital beds, and legislation which is intended to protect the workman against lost time due to sickness, as well as unemployment. He is interested in any measure which protects the individual against truly catastrophic illness. We as medical men feel that we are competent to care for the sick, and that our methods of insurance for medical care will be managed far better and more in the public interest than anything managed politically from Washington. The repeated and flagrant examples of Bureaucratic inefficiency with which we are familiar, gives us confidence that we surely can do a better job.

We are interested in a constant sponsoring of scientific medical progress. In the correlation of accumulated experiences as demonstrated in medical journals and in such meetings as this. We are interested in giving the younger men an opportunity for increased scientific progress so as to increase their ability to serve the public. We are interested in having time and opportunity for study and to crystalize our ideas when we review the results of the past day's work. By this means we hope to overcome the diseases just mentioned, which are the greatest menace to the health of our citizens at the present time.

If the Washington plan for the regimentation of our profession should succeed, it may start out conservatively to gain as many supporters as possible, but in a short time will inevitably lead to the following objectionable features. First, domination by lay people, such as social service workers who have enthusiasm and energy but with little medical knowledge. For example, in the Illinois Emergency Relief Commission, where regulations were made permitting the doctors to make only one or two visits to patients with Scarlet Fever; where it was ruled that no obstetrical cases should be taken to the hospital on government funds, and no permission given to treat the unfortunate on relief if the local officer did not happen to believe that there was such a thing as illness. As you know there are some who question that. Second, there will be a free dispensary type of service to the public, such as in Germany where prior to the war, the ear, nose and throat man was expected to treat 100 patients a day, in addition to his private patients; pediatricians 100 to 120 a day, and a general practitioner 60 to 80, in addition to private patients. There will be no chance to progress professionally or financially. There will be endless governmental reports to be filed, no time for constructive thought or study, and no time to organize mentally and to assimilate the results of the day's work. And, as you all know these last factors are of vital importance. If we cannot give thought to what we have done during the day, do not have time to analyze our problems, we will tend to deteriorate and the public will receive a much poorer grade of medical care.

Since we are confronted by these problems let us give thought as to how these plans to regulate medicine, and ultimately the entire public, are introduced. They are put over by a long and devious method of propaganda, of quoting false statistics, in which the Department of Social Security has specialized in recent years. Sta-

tistics which are falsified. For instance, it is possible to take the infant mortality in some European city, to take a comfortably situated section of that city with a good mortality rate and in order to compare it with a city in the United States with a slum population, pick out the worst ward in that latter city and use its figures as being typical of the entire state and then compare the two. Or, to take a sub-standard negro community, one of the few remaining black marks in our health record, quote its figures on infant mortality as being typical of the entire United States, and then to compare those figures unfavorably with some European country. Then to use that statement to the effect that we as a nation are far down the list in infant mortality. This statement is also applied to maternal mortality and the mortality of adolescents and adults, but those of you who have been in Europe and have seen the conditions of poverty and squalor under which a great many of these inhabitants live, you who have seen the slum districts in London, in Naples, in Alexandria, and have seen the moral degradation and filthy living conditions of Paris, you know that while in our country many things are not ideal they are still so far in advance of anything European that figures tending to prove those individuals are healthier, and have less sickness than we, are definitely based on erroneous statements. Furthermore, in these alleged statistics no comparison is made between cities of comparative population and climate.

Another propaganda point is the statement that the draft with forty per cent rejections of our young men is a reflection on our medical care. It is more of a reflection on the qualifications which our Army enforced rather than the condition of the people who were examined. In addition to illiteracy, there are several reasons for that forty per cent rejection. First of all, the high physical standards of the U. S. Army, higher by far than those of any foreign country. The fact that many were rejected because of non-preventable diseases such as, myopia and psychoneurosis, which are hereditary. Unless we are permitted to go into the field of eugenics and have a governmental enforced system of birth control we will never be able to overcome this hereditary angle.

We now have figures available here which show the real facts, which indicate beyond doubt that our country is by far the healthiest and has the best mortality and morbidity record of any country in the world. Our traducers in Washington speak gloatingly of the fact that other countries, in Europe particularly, have a lower maternal mortality rate than we have here. They fail to state that the pregnant woman in this country dying of heart disease or automobile accident is listed as a maternal death here, but not in the other countries which they seem to admire so much. They also fail to call attention to the fact that while the Swedes in Sweden have a very good maternal mortality rate, the Swedes in Minnesota have a still better one. Facts of this type are not called to the public attention.

What can we as a profession do to counteract this propaganda? How can we protect our own interests and particularly those of the otherwise defenseless public? I think there are several satisfactory answers to this question. First of all, we can continue the good work that we are doing as a medical organization. This is our present bulwark against attack, the work at home by State Societies. For example, in the past 20 years our State Society has been contacting the public through meeting with the various service organizations and clubs, through the press, and sometimes by radio, telling the public of the accomplishments of scientific medicine, telling them of the things that organized medicine has been doing for their welfare. This has been a real accomplishment and on the basis of it we have made many friends throughout the state, we have many friends in legislative fields, and we have more in the grass roots of the country. We must continue this method of making friends and letting the public know what we are aiming to do, how our intentions are based on aiding their welfare. We must do it by contacting various organizations that represent the public. We can do it in a very efficient and thorough way through our State and County Medical Societies. The major national problems perhaps can be attacked by the American Medical Association and the National Physician's Committee but the real ground-work done at home must be through our State and County Societies. Through them we must have closer contact and cooperation with druggists and dentists, with the lawyers who in many respects have as many troubles and as many threats as we have, and particularly in the middlewest sec-

tion we must have closer and better contact with farmers and farm organizations. It is highly important that we realize their problems and that we get together with them so that they will also realize ours. By such contacts we can gradually and successfully overcome any shortage of physicians in rural areas, for we have a mutual interest with the farmers as they have with us.

In addition we must continue our Public Relations Department, both in the State Society and in the National organizations, and our representatives in the Public Relations Department must be used to sell organized medicine to the general public by all means available. This has been done in the past as I have just stated. We have taken an active part and accomplished much and we must now extend our efforts further by contacts through the press, radio and by public addresses. Our new plan in the Public Relations Committee of the State Society holds great promise of making more direct and worthwhile contacts in the future. Furthermore, we must aid the economic side of medicine by cooperation with one or more types of prepayment insurance, and perhaps a choice of two or three types may be advisable. We must have closer cooperation among ourselves. We cannot afford to let personalities interfere with the needs of the profession. A united sentiment among the medical profession is essential. We must continue to improve medical science and practice for by best serving the public interests we best serve ourselves. Our problems are many and our responsibilities are great but despite the threatening clouds of stifling bureaucratic oppression I feel that the profession which in a few short years produced a Lister, an Osler, a Crile, and a Mayo, a profession which has taken the plagues of yesterday and turned them into memories, will also be able to overcome its problems of misguided bureaucratic legislation as well as to advance further against the ramparts of cancer, heart disease, and the other perils of mankind. With a united medical group we can accomplish in the coming generation as we have in the past, things that make miracles seem commonplace. Our hope is that with a free and untrammeled profession we can raise the health and happiness of our American citizens to a level once thought to exist only in the dreams of the poets.

FUNCTIONAL DISEASE VS. ABDOMINAL SURGERY

LORIN D. WHITTAKER, M.D.
PEORIA

No field of medicine is free of the influence of functional disease. The surgeon must recognize functional disease and avoid errors of diagnosis and treatment. Operations may be performed without benefit to the patient or even with aggravation of symptoms owing to failure to recognize functional disease as the causative factor. Functional disease relates to disturbances in the function of the organ in contradistinction to organic disease which relates to pathologic states in the organ per se.

Chronic nervous exhaustion.—This discussion is confined to functional disease arising out of a chronic nervous exhaustion, giving rise to abdominal symtoms owing to irritability of the gastro-intestional tract and to related causes. Functional disease is the great mimic of organic disease. Close attention to all factors in a detailed history and examination and their balanced consideration are required to avoid errors in diagnosis. The abdominal and pelvic surgeon must constantly be aware of functional disease and exclude it before advising an operation.

Pathogenesis of chronic nervous exhaustion.—There is, of course, no demonstrable pathology in Chronic Nervous Exhaustion. The background and development of a chronic nervous exhaustion is of interest. One learns to recognize the type of individual most susceptible to a chronic nervous exhaustion. One can often elicit a history of functional disease in other members of the family group.

The individuals who may develop chronic nervous exhaustion are quite frequently ambitious, producers, and dependable. These are laudatory principles and adherence to them produces successful persons. In the pursuit of these principles, however, some individuals become perfectionists. The housewife can tolerate no dust, each chair has its place; the executive clears each report in full on time, studied to the minutest detail; the factory worker strives to reach a higher level of production. Often these individuals are intolerant of less than perfection in others as well. The housewife is irritated by a cigarette ash on a table; the executive will not tolerate delay or inefficiency in others; the

factory worker seeks upgrading ahead of schedule, and less than adherance to this program is intolerable. These individuals rarely relax. They have given up most of their usual entertainment and often appear to have lost their sense of humor.

Chronic nervous exhaustion may also develop in the so-called average individual when he is subjected to excessive work, responsibility or emotional disturbances.

This is the background for the development of a chronic nervous exhaustion. If each day the housewife, the executive, or worker, can escape completely from his goal, relax and restore his nervous system, a chronic nervous exhaustion does not develop. If, instead, worry, i.e. purposeless mental activity, or sustained mental overactivity is indulged in excessively, the restorative period is inadequate and a residual exhaustion is present at the start of the next day. A progressive nervous system depletion then develops to a clinically evident chronic nervous exhaustion. The incidence of chronic nervous exhaustion increased markedly during the war years. It was to be expected. Relatives in combat areas, persons dislocated from normal family life given responsibilities new to them, executives facing constantly new emergencies, workers forced to longer hours without vacation; all this gave rise to inevitable worries and sustained mental overactivity. Nervous system exhaustion followed and clinical chronic nervous exhaustion developed in many. The surgeon must be aware of this fact or many individuals will be subjected to unnecessary surgical intervention.

Symptoms of chronic nervous exhaustion.— Patients with chronic nervous exhaustion present the same basic symptoms, regardless of the individual causative factors, and these symptoms are quite real to them. The symptom pattern is just as definite and recognizable as symptom patterns of whooping cough, diabetes, or appendicitis. The patient usually has a preconceived suspicion that he has some particular organic disease. Chronic appendicitis, ulcers of the stomach or colon, gall-bladder disease, cancer, adhesions, pelvic infection, and cysts of the ovaries are most frequently mentioned. The patient often apologetically states he cannot clearly describe his symptoms. This fact is so frequently noted that it is of value in suggesting functional disease.

The most frequent complaint is pain. The pain is described as dull aching in character, occasionally sharper, and is not constant. It is commonly noted in more than one quadrant of the abdomen, but may be constantly related to one quadrant, usually the right or left lower. The pain is often aggravated by eating and relieved by a bowel passage. The patient may state that he notices the pain only when tired or under undue strain or tension, and that it is relieved by rest. Minimal tenderness in the area of the pain is noted frequently. Bloating, gas and selective food dyspepsia are reported.

The patient complains of being easily irritated. Poor concentration power, such as re-reading a passage, or the inability to complete a magazine story, is reported. He complains of being more tired on arising than on retiring, even though he slept well. A weight loss is frequently reported and this is usually explained by an associated loss of appetite.

On direct questioning, the examiner obtains a history of irritability, nervousness and worry. He may find that the symptoms vary directly with disturbing circumstances or sustained mental over-activity, and in the absence of these irritants the patient feels better. The onset of symptoms frequently follows changes in environment, work, or habits of the patient. The patient usually is unaware of this correlation until it is developed by direct questioning.

Physical examination reveals a tense, often exhausted appearing individual. The age group varies from the high-school student to patients over 60 years of age. Abdominal examination usually reveals slight tenderness in the area of the described pain. It is no more marked on deep than on superficial palpation. There is no rigidity. A tender palpable spastic sigmoid colon is commonly noted.

Scars of previous operations for the relief of the pain are frequently found. Patients tell of appendectomies, not emergent, performed for relief of their pain, without success. They ascribe the continued original pain to adhesions. Cholecystectomies performed for relief of bloating, gas and pain, in the absence of stones and with persistence of distress are reported. Opera-

tions to divide adhesions of previous operations are recorded with failure again reported.

Examination of the pelvis frequently reveals a moderately tender, freely movable normal uterus, or quite tender adnexal regions without palpable masses. Low midline abdominal scars of pelvic operations, without relief of pain, are common.

A few of these patients feel it necessary to continue this vicious cycle of operations for the relief of symptoms previous operations failed to give. They failed because organic pathology was not the exciting factor.

The chronic nervous exhausted patient, therefore, is a tense, serious, worried man or woman of any adult age who earnestly presents symptoms of a rather typical pattern. He has intermittent dull aching adominal pain, is nervous, eats and sleeps rather poorly, and is more tired in the morning than on retiring. He admits that there are times he feels good, and he may or may not correlate this with the escape from known nervous system irritants. The history may reveal environmental changes preceding the onset of symptoms.

Differential diagnosis.—In this paper we are concerned with the differential diagnosis of certain abdominal and pelvic surgical diseases giving rise to pain. If the history and physical findings have been closely interpreted, and the surgeon is alert to chronic nervous exhaustion, the differential diagnosis should not be difficult.

Mild recurrent acute appendicitis.—This is the most frequently considered organic disease. The pain of mild recurrent appendicitis tends to occur in attacks with complete relief between attacks. The pain is rather constant and is confined to the right lower quadrant. The pain in functional disease does not often occur in attacks; it is more intermittent and may be present in both lower quadrants. Nausea and deep tenderness in the right lower quadrant suggest an appendicitis. The attack is usually severe one day with residual tenderness the next day, and complete freedom from symptoms on the third day. The pain and tenderness in functional disease varies little in intensity. Functional disease does not give rise to a leukocytosis. A past history of similar attacks is quite helpful as is the absence of symptoms suggestive of a chronic nervous exhaustion. Occasionally a background of chronic nervous exhaustion is present, the white blood count is not significantly elevated, yet the symptoms and findings suggest a mild recurrent appendicitis. A therapeutic test by administering an antispasmodic drug is then helpful. If the distress is owing to irritability of the bowel, the antispasmodic drug will relieve it. If the distress is owing to appendicitis the antispasmodic drug will not relieve it.

Peptic ulcer.—Peptic ulcer is to be considered when the pain is in the upper abdomen, burning in character, intermittent, and relieved by alkali. The nervous, tense individual suggests the possibility of a peptic ulcer. The patient with functional disease, however, usually, has food distress and not food relief. His pain is not cyclic; there is no pain, food relief rhythm. The x-ray may reveal pyloric or duodenal spasm in functional disease, but usually the stomach and duodenum are entirely normal. The distress is poorly localized in functional disease, while in peptic ulcer the patient usually accurately localizes it.

Cholecystitis.—The patient with functional disease frequently complains of bloating after meals, associated with upper abdominal distress. He presents a long list of foods known to disagree with him. Often he has eliminated one food after another thought to be the cause of his distress. Bland foods may cause as much distress after eating, in functional diease as the so-called gall-bladder foods. In functional disease the pain is not cramping or severe, there is no radiation, and it usually follows eating irrespective of the food taken. There is no history of jaundice. The x-ray, of course, reveals a normally functioning gall-bladder in functional disease, and minor variations in size, contraction or density of shadow are not to be considered as owing to some degree of organic disease.

Adhesions.—The patient may complain of abdominal pain, bloating and perhaps constipation, and ascribe his symptoms to adhesions from previous operations. The previous operation usually was performed without relief or change in the type of distress. The patient now interprets the same original pain as owing to adhesions. The history and examination do not suggest obstructing adhesions and the therapeutic test by an antispasmodic drug usually re-

lieves their symptoms. The presence of a chronic nervous exhaustion is evident.

Pelvic disease.—The patient may present symptoms suggestive of pelvic inflammatory disease. In functional disease the history of previous pelvic infection is vague. There is no history of exacerbations as in pelvic inflammatory disease. On examination diffuse tenderness is found, but all pelvic structures are freely movable without increasing the pain, no masses are palpable, and the examination is objectively normal. Tenderness does not constitute pelvic disease. The history of chronic nervous exhaustion, if sought, is usually quite evident.

COMMENT

It is evident, therefore, that functional disease gives rise to syndrome patterns distinguishable from organic disease. The diagnostician and surgeon must be alert to functional disease and exhaust thoroughly all suggestive leads in the history and physical examination. Failure to obtain relief from surgery is discouraging to the patient. The pre-existing chronic nervous exhaustion may be aggravated. Occasionally temporary relief is noted, ascribed to mental relaxation and rest incident to convalesence and to the fact that something positive is being done. However, when the patient returns to his old habits, the symptoms return. It is important that the surgeon also realizes that, while organic disease is present, it may be dormant, and the presenting symptoms are those of associated functional disease. Removal of the dormant organic disease will not relieve the patient and may aggravate the chronic nervous exhaustion.

Treatment of chronic nervous exhaustion.—The correct diagnosis of chronic nervous exhaustion is often made but the patient curtly dismissed after being told there is nothing the matter. The pain, the exhaustion and other symptoms are real and the patient needs more positive help. The patient is grateful and is benefited by a few minutes discussion along the following four headings: (1) The patient is told he has a definite disease, a functional disease, a chronic nervous exhaustion. Functional disease is briefly discussed, stressing that it is real and is well understood. (2) The patient is told he definitely does not have the commonly suggested organic diseases, that his functional disease can mimic these organic diseases. (3) Attention may be called to causative factors of chronic nervous exhaustion in the patient's history. Problems of adjustment of these factors to the patient's daily activity and the need for this adjustment are discussed. (4) The patient with abdominal or pelvic distress may be given, when indicated, an antispasmodic drug combined with a sedative such as phenobarbital. He is told the tablet is an aid until he can relieve the causative factors. It is explained to him that the ultimate cure lies within himself. The treatment is one of sympathetic explanation and encouragement.

CASE REPORTS

A few cases are briefly reported to illustrate some of the more common problems in the diagnosis and treatment of functional disease.

FUNCTIONAL DISEASE WITHOUT ORGANIC DISEASE

Case 1. — A male, age 21, had complained for a year of abdominal cramping pain in the right lower quadrant. The pain was frequently associated with nausea. Belching or a bowel movement occasionally brought relief. Of late the pain was periodically more severe. The patient stated he had chronic appendicitis. Physical examination revealed a thin, active male. The examination was normal except for the abdomen. Slight tenderness was elicited in both lower quadrants. The leukocyte count was normal.

Further direct questioning then revealed the boy attended college from 8:00 A.M. until noon, worked in a factory from 4:00 P.M. until midnight, and then visited his girl friend until 2:00 A.M. He had a high tension job at the factory. On days he was able to sleep one hour longer he felt better. A diagnosis of chronic nervous exhaustion, with irritability of the bowel, was made. His condition was explained to him. He was advised to obtain more rest and reduce his activity. Antispasmodic drugs were given. He returned a few months later stating he had had an appendectomy. He again complained of the same original pain. It had returned upon him after resuming his previous schedule.

Case 2. — A woman, aged 46, had complained of attacks of pain in the lower abdomen for the past two years. There had been a more severe attack on two occasions. The pain was cramp-like in character. It was not influenced by eating or by a bowel movement. She had been advised that an infection in the left tube and ovary was present and an operation was necessary. Further direct questioning revealed the patient had an only son. She had been perfectly well until three months after his induction into the army. She worried about him. The first more severe attack followed his oversea orders, and the second followed the receiving of a letter telling of his first combat experience. Examination revealed an intense, worried, obese female. The examination was essentially normal except for a

diffuse tenderness throughout the pelvis. There were no masses. The structures were freely movable. A diagnosis of Chronic Nervous Exhaustion, with irritability of the bowel, was made. The diagnosis and environmental correlations were discussed with her. Antispasmodic drugs were given for a short time. She returned in one month less tense and without distress.

COMMENT

Cases in which organic disease does not exist represent the more common problem. The surgeon must be alert to leads in the history and physical examination suggestive of functional disease. Operations done for patients in this group bring no comfort to the patient or surgeon. Operations done to relieve the patient's mind only aggravate the condition and may be the start of a vicious cycle of operations for the relief of the same functional pain.

DORMANT ORGANIC DISEASE IN PRESENCE OF ACTIVE FUNCTIONAL DISEASE

Case 3. — A woman, age 31, came to us for the repair of a ventral post-operative hernia. She had had elsewhere a hysterectomy ten years previously. A ventral post-operative hernia was repaired two years later but recurred six years previous to her admission. It was enlarging. In addition to the hernia she complained of attacks of nervousness associated with epigastric fullness, dyspepsia and diarrhea. She admitted the attacks followed some nervous system irritation. Between the attacks she felt good. The diarrhea did not awaken her at night. There was no blood, pus or mucus. Her dyspepsia followed many foods. She complained of no heaviness in the lower abdomen, no cramping abdominal pain, nor of weakness in the abdominal incision. She was advised to have the hernia repaired but was told her symptoms were owing to a chronic nervous exhaustion and would not be relieved by repair of the hernia. The background and treatment of the chronic nervous exhaustion were outlined to her. She made an uneventful recovery from the operation. The functional symptoms diminished in intensity as she learned to avoid nervous system irritants.

COMMENT

This patient came for the repair of her hernia so that she might obtain relief of her symptoms thought to be owing to the hernia. It is quite important to impress patients with dormant organic disease and active functional disease that operations performed for the eradication of the dormant organic disease will not relieve the presenting functional symptoms. The patient otherwise will be depressed by the persistence of the symptoms and the functional disease will be aggravated. The functional disease must be brought under control before the dormant organic condition is corrected. If the patient understands the symptom correlations, and the functional disease is well controlled, the dormant organic disease may safely be corrected.

ACTIVE ORGANIC DISEASE IN PRESENCE OF FUNCTIONAL DISEASE

Case 4. — A woman, age 57, had been seen on two previous occasions for functional complaints, referred by the patient to the thyroid gland on the first visit and to the pelvis on the second. The history, obtained at the time of the consultation in question, revealed an epigastric burning pain coming on in mid-morning and mid-afternoon, and, of late, awakening the patient at night. There was some radiation of pain into the back. Nausea was frequently noted with eructation. Medical management elsewhere for three months had not materially improved the condition and surgery was advised. X-ray revealed a duodenal ulcer with crater formation and moderate gastric retention. There was obvious functional disease present. She was nervous, worried, and occasionally became weak and dizzy. Physical examination revealed a tense, thin, cooperative individual. After a hospital study of a week, a subtotal gastric resection was advised and performed. She made an uneventful recovery and left the hospital two weeks post-operatively. About one month following operation she became quite upset, complaining of headache, dizziness and experienced taste and smell perversion. She admitted listening to some misguided friends. For the next three months she was quite a task for her family and various doctors were consulted. A slow improvement finally was noted and at the end of a year she seemed quite adjusted, was eating well and appeared happy. She was free of gastric symptoms.

COMMENT

This type of case probably is the most difficult to evaluate. Definite organic disease is present and surgical interference is indicated, yet the presence of active functional disease presents definite contraindications for surgery. The active organic disease may be aggravating the functional disease and its correction may aid in the recovery from the functional disease. However, the surgical trauma may so aggravate the functional disease that the patient's condition is definitely made worse. The urgency of need for an operation to relieve the organic disease must be evaluated. If surgery is not urgent, the functional disease must be controlled preoperatively.

In the case presented the functional disease appeared well controlled preoperatively. The surgical trauma did not immediately aggravate the condition, but one month later, when the patient was subjected to additional environmental

irritants, a severe chronic nervous exhaustion developed and recovery was slow. Much sympathetic explanation and encouragement was necessary to relieve the patient.

SUMMARY

1. Functional disease, limited in this paper to chronic nervous exhaustion, giving rise to abdominal symptoms owing to irritability of the gastrointestinal tract and to related causes, denotes definite specific syndrome patterns.

2. Functional disease is the great mimic of organic disease, but careful attention to suggestive leads in the history and physical examination will permit the physician to differentiate organic from functional disease.

3. The surgeon must recognize functional disease and avoid errors of diagnosis and treatment. Operations may be performed without benefit to the patient or even with aggravation of symptoms owing to failure to recognize functional disease as the causative factor.

4. The treatment of functional disease follows definite pathways of sympathetic explanation, encouragement and the administration of suitable drugs when indicated.

5. Careful study and evaluation of all factors are necessary for the successful management of the case in which organic and functional disease coexist.

SOME REASONS FOR OCULAR DISCOMFORT

RALPH H. WOODS, M.D.
LASALLE

The outstanding cause of discomfort in eye workers is undesired prism effects due to failure to analyse the prescription, or failure by the oculist to check and analyse the finished correction before delivery to the patient.

Other factors equally as elementary and as universally overlooked are the balancing of accommodation and convergence, cyclophoria and anisometropia.

I have chosen to discuss superficially these few items for the reason that they are so universally ignored, yet so essential to the well-being of each individual examined.

The greater majority of discomfort cases are students, preachers, doctors, lawyers and other desk workers. One has only to ask himself where such an individual has his discomfort. Is it at infinity, or is it at the stipulated reading distance? Reading distance, of course! This calls to mind the case of the twenty-five year old school teacher with five pairs of glasses, all fitted by reputable oculists, all essentially the same correction, +25 or —25, both spheres and cylinders fitted under drops. The teacher's complaint was inability to correct papers and to study without fatigue. No one had taken the trouble to measure the punctum proximum. The punctum proximum proved to be at 13 inches. She needed a +1.00 add to give a diopter of reserve accommodation. Any discomfort case accepting only a +25 or —25 sphere or cylinder has something wrong besides this trivial refractive error.

Again, there is the case of the ten-year old school boy who required a +2.00 to make his eyes equal to the eyes of an emmetrope for distance. He was refracted under atropine. He returned six months later with the statement that reading was difficult. The amplitude of accommodation was then measured and showed that he needed an additional +2.00 add. The amplitude should have been measured first before the drops were used.

Measuring the amplitude of accommodation is just as essential as the static refraction.

We are here face to face with the subject of synkinesis, in which with each prescription for lenses we aim to secure some semblance of balance between accommodation and convergence. These two functions can be separated only within certain limits if the patient is to remain comfortable.

At this point I desire to admonish readers never to depend upon the findings with the Maddox Rod or with the cover test in discomfort cases. Never!! Either of these procedures shows what the extrinsic muscles *may* do when suspended. Neither one shows what those muscles *can* do when called upon to work. Their actual lifting power is the information we must have.

An emmetrope in reading at 13 inches uses 3 D of accommodation and 3 M. A. of con-

---

Presented before the Section on Eye, Ear, Nose and Throat, 104th Annual Meeting, Illinois State Medical Society, Chicago, May 16, 1944.

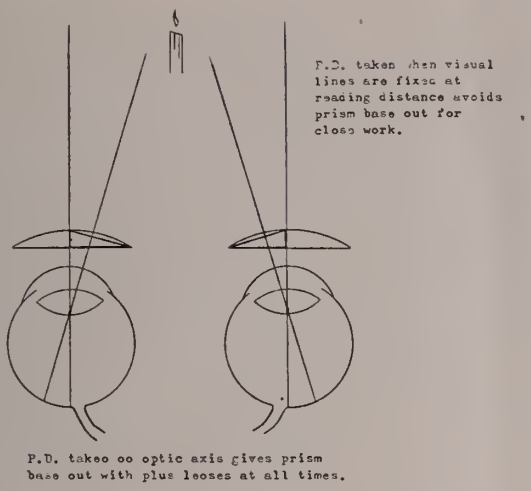


Figure 1

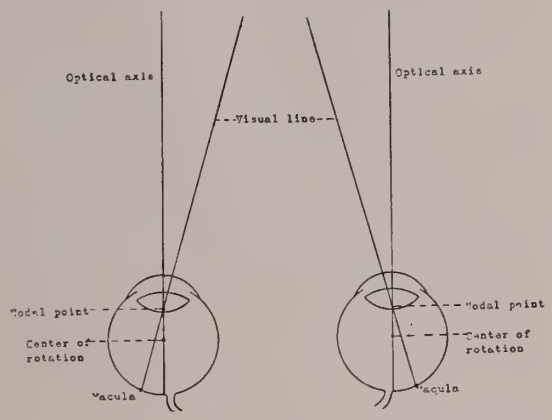


Figure 2

vergence. A 5 D hyperope in reading at 13 inches without his lenses, uses 8 D of accommodation but only 3 M. A. of convergence. Prescribing a +5. establishes synkinesis and makes the individual equal to the emmetrope of the same age, if such lenses are properly centered for the working distance.

Suppose we add 1° * prism base out to the correction of our 5 D hyperope. When reading at 13 inches he ordinarily uses 3° of convergence, but because of the 1°prism base out we have added, he must use 4° * of convergence to maintain binocular single vision. This eye worker is, of course, uncomfortable. The situation is exactly that with which the average refractionist is encumbering his patients day after day.

When measuring the face and prescribing plus lenses, the lenses should be so placed before the eyes that the visual axis of each eye falls through the optical center of the lens in order to avoid untoward prism effect. (Figure 1).

One must bear in mind that there is a wide difference between the optical axis and the visual axis of an eye. The usual technique is to measure and record the optical axis with the vision fixed at infinity as the pupillary distance.

A moment's study of the drawing (Figure 2) will explain the difference between the optical axis and the visual axis, and why the visual axis should be used as a basis for the pupillary distance.

The optical axis is a line drawn from the posterior part of the eye through the center of rotation, then through the center of the cornea into space.

The visual axis is a line drawn from the macula through the nodal point and extended into space. In hyperopia it falls to the nasal side of the corneal center. In high myopia it may fall to the temporal side of that center.

From experimentation with curved reflecting surfaces, we know that an image from a *convex* mirror is virtual, upright, reduced and is focused behind the mirror, never farther back than the principal focus.

The front surface of the cornea is a convex mirror.

If one holds a minature light, as our opthalmoscope globe, before eyes to be observed, a reflection (or reflex) is noted from each cornea. (Optically, this reflex is not from the surface of the cornea, but from behind its surface. However, if the eye is looking at the light, the image is on the visual axis). Now if the observer closes one eye, places the minature globe immediately under his open eye, takes a position at the usual reading distance of 13 inches (or 16 inches if that reading distance is desired) directly in front of the patient, and instructs the patient to gaze directly at the miniature lamp, he, the doctor, is enabled, with his one open

*Degree (°), Prism diopter (Δ) and Centrad (∇) in the powers we use in regular routine are practically identical up to 20 and the terminology interchangeable. Thorning, Page 41, or Duke Elder.

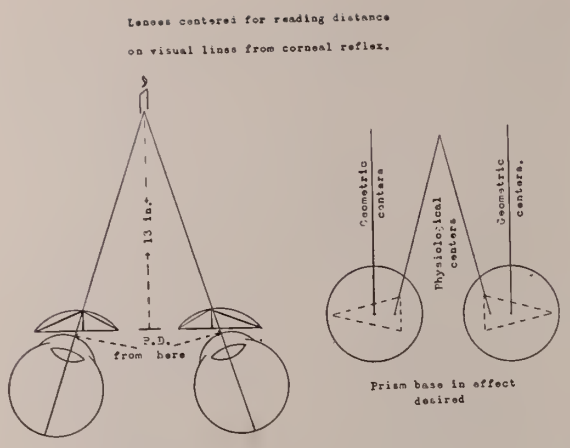


Figure 3

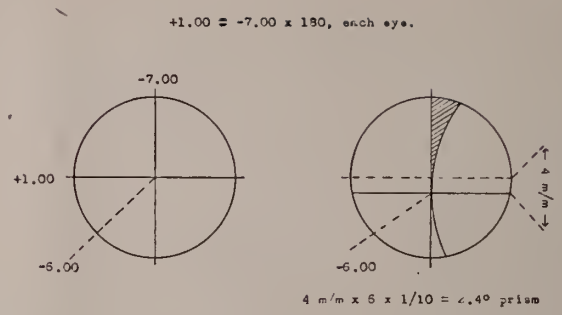


Figure 4

eye, by means of a millimeter rule, to measure from reflex to reflex, and obtain a very exact pupillary distance. For younger hyperopes who are desk workers, this is the only pupillary distance to be given on the prescription.

The procedure for the myope is considerably different.

(One will find by actual expermentation that if the patient is instructed to fix his eyes on the bridge of the operator's nose, and if the operator, with one eye closed and without alternating his eyes, measures from nasal limbus of one eye to temporal limbus of other eye of the patient, the measurement thus taken will correspond closely to the reflex measurements. This measurement is also taken at the patient's specified close working distance).

What happens when the distance P.D. is prescribed for close working hyperopes? Use the example and drawing given in a previous paragraph and remember that each millimeter of decentration on a 1 D lens gives 1/10 degree of prism. There is at least two millimeters difference on each eye between the distance P.D. and the reading P.D. If the distance P.D. is prescribed, the 5 D hyperope, in reading, will have to overcome 1 prism diopter base out on each eye. Discomfort, of course, or repression, should his adduction and reserve convergence be low. (Figure 3).

Vertical displacements through faulty grinding and careless inspection are a very frequent causes of discomfort to the patient and grief to the physician and will continue to be so until such time as the physician learns to spot centers and put the responsibility for error at its source; i.e., the optician. The time to do this is before the prescription is delivered.

On a low-powered lens, it may make little or no difference, but on a formula such as went from our office recently —
R+1.00 —7.00 × 180, L+1.00 —7.00 × 180, the left glass had its center ground down 4 millimeters below the right. In the vertical meridian of this lens the power was —6. When the patient looked straight ahead he had to overcome 2 4/10 degrees. It was simply intolerable. (Figure 4).

When the complaining patient returns, the psychological moment has been forever lost.

A good pharmacist checks and rechecks every prescription, item by item. The optician is expected to analyse every optical prescription, but so very often he does not do so. His error, if not detected by the oculist, is interpreted by the patient as the oculist's error. Therefore the oculist should neutralize every lens, spot every axis, spot every center, vertical and horizontal, and analyse prism effects as the lens is laid out on a protractor before delivery to the patient. No one can claim to be a finished opthalmologist until he can analyse a lens as readily as he can diagnose a pathological state.

Faulty facial adjustments and alignments and the correction are also a part of a finished oculist's job in the avoidance of discomfort.

Since so little is said about cyclophoria and since it is a real clinical entity and not at all un-

common, I shall make passing mention of its detection and treatment.

Not long ago I assisted with an examination of a group of pre-school children. For each child I used the cover or screen test. The left eye of one youngster gave a very visible torque under cover and recovery on lifting the card. This particular eye rotated on its anterior posterior axis, allowing the vertical axis to rotate out at the top, pointing to a deficient innervation to the superior oblique. In this situation the inferior oblique came into ascendency and the eye was also rolled up and out. The diagnosis, of course, was a 4th nerve palsy.

Frequently we hear the term axis tolerance, which is another way of avoiding the nomenclature of cyclophoria. Cyclophoria may pre-exist or be introduced by faulty placement of cylinders.

Cyclophoria is quickly measured by two Maddox Rods, one red and the other white. These may be placed so that the streaks will fall either both vertically or both horizontally. Either way.

Let us say that the streaks fall vertically. They should be parallel. When the red rod is on the right eye and the patient states that the red streak at its upper end rotates nasally, this eye is torqued. An eye is always rotated in the opposite direction to the false image. In this particular case the superior oblique is at fault with resulting so-called plus cyclophoria.

When a stigmatism is present to any degree and the axes are *a*-symmetrical, it may be necessary for comfort to shift one of them to make them symmetrical. It will then be necessary to change the power of the cylinder to get the best vision possible for this eye in the new axis. To get the exact differential of the cylinder power after shifting the axes, see table in Maxwell. Orthoptic exercises for cyclophoria are described in Savage's "Ocular Myology" and also in "Cardinals of Refraction".

Cyclophoria may be absent at infinity and decidely marked at the reading distance. The test is made exactly the same.

It may also be found that the correcting astigmatic axis may vary considerably for infinity and for reading. So also may the power of the cylinder. Either variation is a source of discomfort.

Anisometropia is another exasperating clinical entity. It may not only introduce the factor of metamorphopsia, but the correcting glass will likely produce undesired prism effects. Because of these two factors one can adhere to the rule that the spherical difference of the two lenses shall not be over 1.50 D.

Let us take the prescription of R+4.00, 20/20, L+7.00 20/30. It is explained to the patient that while the +7.00 gives very good vision, a +5.00 will be much more comfortable because of the difference in size of the two retinal images. He wants the +7.00 because of the vast improvement in vision and may tolerate it when looking into infinity. But what happens when he tries to read?

In reading, an individual looks 6 to 8 millimenters below the optical center of the lenses. With the right eye looking 6 millimeters below the center (using the rule previously stated) he will be receiving 2.4° base up, while the left eye will be receiving 4½ prism diopter base up. Some way must be devised to secure a compensating prism base down on the left glass for close work if this combination is to be used at all. It will, however, usually not be tolerated.

The above is parallel to a cataract case having good or fair vision in the unoperated eye. (One often wonders why he lets himself in for all this grief by operating).

The principal theme of this discussion is the analysis of lenses. Each lens should be spotted as to axis of cylinders, optical centers and the optical center of the segment if one is added. A simple, inexpensive contraption frequently advertised will do the work of instruments costing ten times as much. It consists of a sliding target carrying right-angled crossed lines, a clear glass with a spring clip to hold the lens under scrutiny, a pinhole for sighting through the line of centers, and a tooth pick to carry the pigment solution, which may be a little whiting in water.

If one is unable to neutralize by hand, then of course the purchase of a lensometer is justifiable. In all cases the analysis of lenses should be done before the prescription is delivered.

DISCUSSION

Commander James E. Lebensohn, Chicago: — Dr. Woods' talks are always stimulating because of his intense interest in the refinements of refraction. One must avoid leaving anything to the discretion of the optician. For instance, the refractionist may want to alter the P.D. for certain reasons to the advantage of the patient. The optician is not psychic, and cannot possibly know the variations that should be made. The

interpupillary distance for far vision should first be determined as accurately as possible. For children too young to cooperate a good approximation is secured by measuring the distance from the outer end of one canthus to the inner end of the other. In cases of squint or muscle imbalance the examiner and patient should face each other, fixing their opposing eyes alternately, while keeping the other occluded. The examiner with his left eye fixes the zero mark of the ruler in the center of the patient's right pupil. Then, while keeping the head stationary, fixation and occlusion are reversed in both patient and examiner, and the examiner notes with his right eye where the pupillary distance falls in respect to the left eye of the patient. In the standard method of taking the interpupillary distance, the patient fixes with both eyes at a distant object. Because most offices are so small, it is advantageous to have the patient look at an object reflected in a mirror on the opposite wall, which, of course, doubles the distance. Though Dr. Woods' method of determining the interpupillary distance at the near point is accurate, I believe it is preferable to deduce this mathematically from the distance P.D. (demonstration).

The synkinetic action of accommodation and convergence must not be overlooked. A myope, aged 30, recently consulted me because of difficulty in reading. Because of this complaint, a previous refractionist had reduced his correction of —3.00 S. in each eye, to —2.00 spheres, which made his reading difficulty even worse. Examination of the muscle balance disclosed an exophoria of 4 prism diopters for distance, 16 for near. Since one diopter of accommodation corresponds to 6 prism diopters of convergence, I increased his static correction by one-half diopter, prescribing for each eye —3.50 S. This stimulated his convergence sufficiently for him to read comfortably (demonstration).

Dr. Ralph H. Woods, LaSalle (closing): I want to thank Dr. Lebensohn. I agree with him, but he has opened an avenue for discussion which could continue all afternoon, so we will let it go for another time.

NEUROPSYCHIATRY TRAINING

(Continued from page 263)

County, the various psychiatric wards of private hospitals, and the psychiatric clinics of the Juvenile, Criminal and Municipal Courts. Preference will be shown to veterans of World War II.

Salary for the first year will range from $150 to $200 per month; second year $185 to $245; third year $310 to $360.

Applicants will send their requests to Dr. Harry R. Hoffman, State Alienist, Illinois Neuropsychiatric Institute, 912 South Wood Street, Chicago. These residencies start July 1, 1946.

THE CHICAGO PLAN OF TUBERCULOSIS CONTROL

Frederick Tice, M.D.
CHICAGO

The plan of tuberculosis control, at present operative in Chicago, rests essentially on the three-point program initiated in 1931. In 1931, when the late Dr. Allan J. Hruby and the speaker took office as the Directors of the Municipal Tuberculosis Sanitarium, they were faced with a very acute and pressing problem. There were seven hundred patients on the Sanitarium waiting list, the majority advanced cases. Similar waiting lists clogged the files of the other free institutions, Oak Forest and Cook County Hospital. Looking at the situation from another angle, there were around two thousand open cases roaming the streets and, to add the last straw, the State regulations declared that no open case of tuberculosis should live in contact with children. The prospect of hospitalization was slight or nil and the patients, as they waited, became progressively worse.

In common with experience elsewhere, the home treatment then available was inadequate. Cough medicine, periodic examination, and an occasional x-ray do not cure advancing tuberculosis, nor do such measures influence, to any degree, the management of the open case. To our mind, back in 1931, something more realistic than expectant treatment in the home had to be at least attempted.

THE THREE-POINT PROGRAM

In view of all the facts, we decided to make the attempt. In appraising the problem, we envisioned three possibilities:

A — An increase in institution accommodations
B — A massive collapse therapy program
C — Immunization by the BCG vaccine

The more we considered these three possibilities the clearer it became that none of the three separately, but all three combined held the answer. Institutional expansion alone would not suffice. For economic reasons, expansion could never grow to meet the need. A few figures will illustrate this.

When we took office in 1931, there were 18,317 diagnosed cases of tuberculosis in Chicago and 1,567 beds. Manifestly, it was physically impos-

---

Read at Institute of Medicine meeting, Palmer House, November 14, 1945.

sible to find a bed for every patient. Would it continue to be impossible? When we considered that there were in the community at least as many unknown as known cases, the problem multiplied itself. Look as far as we might into the future, estimate as well as we might the taxpayer's ability to pay, we would never see the day when every tuberculous patient that needed an institutional bed would have a bed. In any event, a point only too frequently overlooked, the bed was not for the "duration". With the average case the period of sanatorium stay is comparatively short; the patient spends many more hours of illness outside the institution than in. Taking all cases, recessive and progressive, a year in the sanatorium and three or four years in the home might not be a bad guess. Out-patient management, in comparison with sanatorium care, represents only a fraction of the cost. The matter of cost was fundamental. To us, enlargement of the field program and extension of the sanatorium influence into the home constituted a large part of the answer.

All we could see back in 1931 (today, for that matter) was a modest expansion in institutional facilities, with an active supplementary program, including BCG, in the field.

Increase in Institutional Accommodations. — Consequently, we set our caps for the first point in the program, the expansion of institutional facilities. Though working against the handicap of a restricted budget, 121 beds were added to the Sanitarium, 250 more with the inauguration of the North Riverside Branch. Later, the surgical division at the Sanitarium was expanded and 60 more beds added. Further measures of expansion, including conversion of a nurses' home and a P.W.A. addition, were halted abruptly for lack of funds.

It is necessary to mention that available tuberculosis money is not, in any sense, adequate to the need. Lack of funds has been the ever-present bugbear in the Chicago program. Detroit, for instance, with half the population, has a larger tuberculosis appropriation than have we. Repeated efforts by the Directors to remedy the condition and secure larger appropriations have been unavailing. For the time being, therefore, and for lack of better, we are obliged to content ourselves with the physical expansion already secured.

Physical expansion, however, is not everything. There is such a thing as functional expansion and functional expansion is no myth. By acceleration of tempo, shortening of the sanatorium stay, generous use of out-patient facilities, a large institution can easily gain the equivalent of physical increase. In other words, thinking in terms of expansion, turnover must be considered as well as walls. If, for instance, through new technics, a thousand-bed sanatorium, without impairing its results, can reduce the average sanatorium stay from twelve months to eight months, it will have increased its capacity about one-third, or by 330 beds. In 1931, the technics were available; they were new and their consideration brings us to the *second point of the program, large scale collapse outside the sanatorium.*

Since we could do nothing further with the Sanitarium walls, we could attempt to expand the Sanitarium influence; field pneumothorax, in massive application, could be made to carry at least part of the institutional load. In our reasoning at the time, ambulant collapse therapy became definitely hooked up with the bed shortage, a natural derivative of our expansion difficulties. The relationship is, perhaps, best expressed by a quotation from one of our collapse therapy bulletins. I quote:

"Sanitarium accommodation is limited, the confines are soon reached and beyond that we can not go. Not so with the extramural branch! Here, in the last reaches of Sanitarium inflation, the field clinic begins, expansile, inexpensive, elastic in its application to changing needs."

The Collapse Therapy Plan. — Such were the motives behind the ambulant collapse plan. The road to fulfillment was not easy. In 1931, pneumothorax held a very minor place in the tuberculosis program. In accordance with the thought of the day, the indications were narrow, the field restricted. By and large, pneumothorax was considered a sanatorium measure, a delicate, even dangerous measure to be applied only after the customary sanatorium routine has been applied. Many sanatoria were doing no collapse; some had five per cent of their patients under

pneumothorax; very few, not including our own, ran over ten per cent.

Neither from the point of view of functional expansion, nor from the point of view of public health, had the possibilities of collapse therapy been correctly estimated. Pneumothorax, within its indications, was beneficial to the individual patient. Pneumothorax, when properly administered, converted the sputum in fifty per cent, or more, of suitable cases. These were the facts and they were known. The knowledge, however, was not carried to logical conclusion or practical application.

The value of large scale pneumothorax as a public health instrument was not recognized. The open case was admittedly the crux of the tuberculosis problem. Much was said about institutional isolation; nothing said about the mechanical isolation of collapse. To us this latter method seemed of vital importance and we made ourselves very clear on the matter, as evidenced by a paragraph in the 1931 Collapse Therapy Bulletin. I quote:

> "The mechanical isolation (of collapse) must be from its nature, more perfect and complete than personal isolation. The immense significance of this fact must be realized and properly evaluated. We can turn off the fountains of infection more expeditiously, more thoroughly, by compressing a diseased lung than by isolating a patient."

All this seemed very fair on paper. How could it work in practice? Was field pneumothorax, in widespread application, practical? To carry the advanced case through the clinic, from the initial injection onward, seemed no light undertaking. At the time, dangers of ambulatory pneumothorax were over-emphasized, even exaggerated. According to the medical thought of the day, the initial injection and the preliminary stages of pneumothorax could not, and should not be administered outside the Sanitarium. This was the first principle and disregard of it implied dire results, embolism, shock, infection, and other serious complications.

A Personal Experience.—To the speaker, this catalogue of dangers and disasters was rather difficult to understand. As it happened, he had had some interesting experiences in ambulant collapse therapy. In 1898, just after finishing his internship at the County Hospital, while a house physician at the old Dunning Tuberculosis Hospital, he had worked with John B. Murphy in a pneumothorax program, using a technic that one would term, now-a-days, as crude, to say the least. No fluoroscope, no x-ray, no manometer! Not even transportation! The patients had to walk, or ride bicycles for a distance of two or three miles and, strange as it may seem, results were usually good.

The recollection of that experience could point in only one direction. If ambulant pneumothorax, without manometer, or x-ray, was possible in 1898, ambulant pneumothorax conducted with the aid of modern appliances should be possible in 1931. Encouraged by this line of reasoning, encouraged further by sanatorium background to provide for emergencies, by a staff of 150 field nurses to provide supervision in the home, the extramural collapse program was initiated. Simultaneously, the dormant collapse program at the Sanitarium (66 patients — 6.5 per cent) was stepped up and measures of coordination between the two branches arranged. Emergency cases, cases with complications, or cases needing additional surgery were to be sent to the Sanitarium; in return, Sanitarium cases with well-established collapse were to be referred to the field organization. From the first the plan prospered and the volume of field collapse increased faster than had been anticipated.

Development.—The story of the physical development is interesting, even amusing. The first pneumothorax station was started in the basement of one of our clinics. Soon, however, the volume outgrew accommodations and the old Iroquois Memorial Hospital on Wacker Drive was taken over for collapse work. The entire four floors of this hospital were soon busy with collapse activities and again, as a suit and a growing boy, volume outpaced accommodations. The patient-load, even on such a building as the Iroquois, was too great. Despite good organization, congestion occurred and the patients complained of waiting. To obviate this difficulty we decided, a year or so ago, to decentralize, proposing as the framework of this decentralization, the establishment of a pneumothorax station in each of our seven clinics. Five of the stations, plus a station at the Sanitarium, are already in full operation and the two remaining

clinics are being organized for pneumothorax work.

Though the process of decentralization has introduced a new factor of complexity in the matter of records and statistics, the advantages outweigh the disadvantages. Congestion and waiting are eliminated, and the patients, who previously had to travel long distances, receive their treatment in the neighborhoods in which they live.

Growth in Terms of Figures.—Some figures will illustrate the growth of the field collapse program. Starting with a few refill cases in 1931, 314 patients were under treatment two years later. By 1936, when the clinic was moved to the Iroquois Hospital, 1,123 patients were being cared for. As of January 1, 1945, the clinics had reached a registration of 1,800 cases. Of these, in round numbers, 1,600 are under actual inflation, 150 are under observation for collapse, and 50 are under post-treatment supervision. A good percentage of these cases have had their entire treatment, from the initial injection onward, in the field.

Results.—The results of the work to 1938 have been fully chronicled in our Collapse Therapy III Bulletin. At the time of the report, 76 per cent of the treated cases were living as against 39 per cent of the controls, that, with regard to positive sputum patients alive at the time of the report, 83 per cent of the minimal cases were converted, 76 per cent of the moderately advanced, and 68 per cent of the far advanced.

In the main, the tenor of these results has been maintained to the present time. An excellent proportion of the positive sputum cases are being converted and are thus made safe for the community. A large number of patients are being rehabilitated and returned to gainful occupation. So definite is the trend toward resumption of gainful occupation that it has become necessary, repeatedly, to augment night sessions in the interest of the pneumothorax patients who are working during the day. At the present time, 13 night sessions are operative to care for the 635 patients who report in for their refills after the day's work. The number is growing daily and such growth offers the best and clearest indication that large scale collapse therapy, in addition to its public health implications and individual benefits, is a measure of physical and economic rehabilitation.

The survey of the material is now in progress and final and complete analysis of the ten years collapse will soon be available. From present indications, such final analysis will corroborate our previous reports and re-emphasize our 1931 arguments for large scale collapse.

Before leaving the subject of collapse therapy, we have to ask ourselves one question. Is pneumothorax in widespread, even massive application, pneuothorax of the type pioneered by the Municipal Tuberculosis Sanitarium, justifiable and practical? We believe it is. Our results have been amply confirmed by the work of others, and everything points in one direction. We are as convinced now as we were in 1931, that collapse of the kind described, is both a fine public health instrument and a medium of cure and rehabilitation for the individual. At this morning's session, Dr. Camillo E. Volini has elaborated on this subject in his presentation of "Pneumothorax Therapy, Including Ambulatory Pneumothorax." Collapse therapy, however, is directed toward established tuberculosis. Is it necessary to wait until tuberculosis becomes established? This brings us to the last point in the program, BCG vaccine.

BCG

We have long been convinced that public health authorities in this country are unduly indifferent to the possibilities of immunization. The speaker refers, of course, to immunization by the Calmette-Guerin method, the only method, to date, of approved value. The worth of the vaccine has been liberally attested by the results in Europe and the South American countries, by the million children vaccinated in France, 500,000 in Roumania, the 86,000 in Brazil, the 56,000 in Argentine, the 58,000 in Uruguay, the 20,000 in Canada.

Influenced by this world opinion, Dr. Hruby and the speaker, when attending the International Tuberculosis Congress at The Hague, visited the Pasteur Institute. Calmette, after repeated and intimate consultations, and after inspection of his laboratory, convinced us that BCG was harmless, that it was effective, and that there were simply no contraindications to its use. As a result, in 1933 we sent a competent bacteriologist to study the technic at the

Pasteur Institute. This representative, Dr. Sol Roy Rosenthal, spent several months at the Institute, studied the technic under direct supervision, and brought the cultures back with him. Since that time Dr. Rosenthal has been working in a special laboratory, equipped with every possible device to insure safety, accuracy and thoroughness.

At first the study was limited to experimental animals and the research fully corroborated, in every respect, the findings of the foreign workers. More recently the work has been extended to children and young adults and, to date, 2,178 have been vaccinated and 2,157 others, in similar economic and social brackets, taken on as controls. In the vaccinated group there were three clinical cases of tuberculosis, with one death, whereas in the control group there were twenty-three cases of clinical tuberculosis, with four deaths.

All in all, the case for BCG seems fairly clear. In over three million children immunized with BCG there has not been one proved case of resultant tuberculosis. Figures are only part of the picture. The statistical phase is confirmed and reaffirmed by certain physiological considerations. We are, I suppose, entering debatable ground. In certain quarters, tuberculosis immunity is still controversial. It is necessary to remember, however, that immunity against smallpox was held as controversial for a long time and that full and final acceptance is comparatively recent.

Allergy and Immunity.—The author belongs to that group who believes that allergy and immunity are closely related. In large urban centers the majority of people eventually develop allergy as represented by the positive tuberculin reaction. If allergy has to come anyway, why not allergy of a beneficient type? If infection has to come, why not measured infection with an avirulent organism of bovine type rather than measureless infection with a virulent organism of human type? Why not attempt to neutralize the danger by a scientific substitution that is harmless and that holds promise of a good measure of immunity? Why not follow the lead of the European and South American countries and extend the benefits to as many threatened individuals as possible? Such is our present attitude and the stand seems logical.

If this is true, and we believe it is, all indications point to BCG as a pivotal component of the tuberculosis program. Through collapse therapy, sanatorium care, home care, and follow-up we can, more or less, control tuberculosis. Only through BCG or some similar immunizing procedure which infiltrates slums, where tuberculosis breeds, can we hope to eradicate it completely.

At the recent International Congress of BCG which met in Havana, Cuba, Dr. Sol R. Rosenthal presented a paper entitled, "Ten Years' Experience with BCG (Experimental and Clinical)", which constitutes a resumé of his work up to the present date.

Encouraged by results to date, the Municipal Tuberculosis Sanitarium is on the eve of great expansion in the BCG program. Contact with the physicians and workers in negro areas of high tuberculosis mortality has been established and plans are being made to coordinate the BCG program with our total x-ray survey of the congested areas. Fortunately, this latter project is in full swing and some discussion of it is essential to the purpose of this paper.

Mass case-finding, through the x-ray, is an interesting development and its realization in Chicago constitutes Point Four in the program. By total survey (a term coined for the occasion) is meant the x-ray examination of entire communities, with special emphasis on areas of high tuberculosis mortality. Chicago, in common with other large communities, had run the gamut of survey possibilities, including routine clinical surveys, Saturday morning surveys, tuberculin surveys, and school surveys with the tuberculin-x-ray screen. The school surveys deserve a special word.

The School Survey.—In 1937-38, with the help of the Tuberculosis Institute of Chicago and Cook County, we undertook a survey of the Chicago schools, public and parochial, grammar and high. In the three-year period, 167,000 children were tuberculin tested and 23,000 positive reactors x-rayed with standard size film. The results were unsatisfactory. The cost per case found was much too high, over five hundred dollars for each new case brought under observation. In the lower grades, according to our

experience, the cost was definitely prohibitive. In 58,000 children under twelve, subjected to examination with the tuberculin-x-ray screen, only nine cases of pulmonary tuberculosis were found.

The school survey not only taught us that it was financially prohibitive, but led to other changes in technique. Among these, was the instituting of a single Mantoux tuberculin test, instead of the three graduated doses as generally used, and by so doing reduce the financial cost and labor preceding the x-ray filming. Later it was found advisable, and expeditious, to abandon the tuberculin testing entirely, as it was far less expensive to go ahead and film the entire group, reactors and non-reactors.

Experience with the school survey was also responsible for another modification in technique, really an innovation, the building of the mobile unit. After completing the tuberculin tests, it was necessary for all of the positive reactors to visit the neighborhood clinic for the necessary x-ray filming, which usually required an absence from classes of from one to three hours. To obviate this loss of time, it was conceived, plans drawn, and special automobile truck constructed, provided with the latest type of x-ray equipment, a darkroom, three dressing rooms, electric lights, fans and heater. It was then a simple matter to park the unit on the school ground, connect the cable and x-ray the pupils in rotation, as previously arranged, without any loss of time. This, briefly, was the origin of the mobile x-ray unit, which is now available on the market, and has been generally adopted all over the country by civilian and government workers in the field of tuberculosis.

In the October 14, 1944 issue of This Week Magazine, published by the Chicago Daily News, there appeared an interesting article by J. D. Ratcliff, entitled "The Next Plague to Go", which outlines the proposed plan of Surgeon General Thomas Parran of the U. S. Public Health Service, in which no mention is made of the Chicago Municipal Tuberculosis Sanitarium, but emphasizes the three-point program, as already outlined, which has been, and still is, in operation since 1931.

The Miniature X-Ray and the Total Survey.—Dissatisfied with the results of the tuberculin-x-ray screen, convinced of the necessity of survey, we turned to other possibilities. Some other measures must be found, a measure, by preference, dependent largely or entirely on the x-ray. Since 1931, the Directors of the Municipal Tuberculosis Sanitarium had entertained the thought of massive x-ray survey in areas of high tuberculosis mortality. That was as far as we got. The survey ended with the thought. In terms of standard size films, the cost was too great and it was only with the advent of the miniature x-ray that we could see a way out.

Dating from DeAbreu's article, the speaker has been greatly interested in the potentialities of the miniature film for mass case-finding. A letter on the subject to DeAbreu, in 1938, for some reason or other, remained unanswered. Our interest, however, continued and the Municipal Tuberculosis Sanitarium worked with the General Electric in the development of the 4x5 apparatus.

As may be supposed, our cooperation was on the clinical side. We referred patients for x-ray and examined the films as the experiment progressed. The results were favorable and held good promise for our thought of total survey. As soon as a unit was available, we immediately laid plans for mass case-finding in the negro areas and started work on April 15, 1940. The approach had been worked out, detail by detail, and on somewhat unique lines.

Survey Technics.—A preliminary educational campaign paved the way and "X-ray to the Doorstep" became the slogan. Since we knew from experience that a large percentage of the residents would not come to us, we decided, as Mahomet with the Mountain, to go to them. Our mobile unit with its photo-roentgenographic equipment, was so routed from station to station, that no resident in the congested areas had to walk more than a block or two for his x-ray and many came from across the street or around the corner. A program of home visitation bolstered the effort and the response, from the first, was excellent.

Results.—In the two years that the survey has been operative, 79,232 applicants have been photo-fluorographed and 2,426 new cases of tuberculosis found on first examination. Classified according to extent of lesion, 1,138 were in the minimal, 940 in the moderately advanced, and 348 in the far advanced stages. Compare the 47 per cent of minimal tuberculosis found in the survey with the 18 per cent found in routine

clinic examinations, and we have some idea as to the merits of this type of case-finding.

Equipment.—Throughout the entire work, with the exception of some isolated experiments with the 35 mm. and a comparative study with the 70 mm. the 4x5 General Electric photo-fluorographic apparatus was used exclusively. Our experience with the 35 mm. was unsatisfying. On the other hand, our experience with the 70 mm. has convinced us that this new type of apparatus is designed to change the course of photo-fluorography very materially. As the subject of the 70 mm. is both topical and timely, a brief word as to our comparative study may be of interest.

To establish the relative merits of the 70 mm. and the 4x5, 1,813 industrial employes were subjected to examination by both types of equipment. The films were read independently by the three interpreters. The results, summarized in a paper presented for publication, will doubtless be of interest to those contemplating programs or actually engaged in survey. To boil the detail down to mere outline, one minimal case uncovered by the 4x5 was missed by the 70 mm. and in several other instances a case read as suspect by the 70 mm. was classed as minimal by the 4x5.

Before leaving the question of the survey, it may be well to mention two developments that resulted from the propaganda incidental to the work. Since these two developments, the professional school and the technical schools, have since became part of the Chicago plan, some discussion is in order. A word has been said concerning the educational campaign that paved the way. At first this campaign was directed exclusively to the laity. We found, however, as we went on, that the family doctor was the front line soldier and we needed him.

Post-Graduate Education.—"No tuberculosis program can hope to reach even a fair measure of success without the moral and practical support of the doctors in the community. The physician, at the bedside or in his office, exercises a more potent and salutary public health influence than do bushels of propaganda."

This quotation, taken from our 1933-34 Bulletin, dedicated to the Chicago Medical Society, defines the position as it affects us locally. In our educational effort we have always attempted to include the practicing physicians; as evidence to this effect, in 1934, in the Bulletin referred to, we offered the members of the medical society "a school of collapse". The language may interest you, and I quote:

> "Is there any good reason why the medical profession should not have an active, or even the leading part in a community collapse program? We see none. With the exception of the impoverished case, for whose care the public institution is designed, the practicing physicians might, or rather should, take over the entire program."

This represented our attitude toward the physicians in 1934, it represents our attitude now. Many Chicago physicians have taken advantage of our offer of pneumothorax training, many others, who could benefit both themselves and the community by a thorough grounding of the principles and technics of pneumothorax administration, have failed to respond. Needless to say, the offer still holds good.

In previous years, repeated attempts had been made to interest the practicing physicians in post-graduate tuberculosis work. Lectures were held at the Sanitarium, and due to time-consuming transportation, the attempts failed.

The Tuberculosis School.—This time, with the importance and scope of the survey in view, we decided that the attempt should not fail. Again the question of Mahomet and the mountain. Since the physician would not come to the School, the School would go to the physician. A comprehensive three months' curriculum was drawn up and the school, now called the "Neighborhood School of Tuberculosis" was established in the negro areas. Well over half the negro physicians of Chicago attended and received diplomas. The response was so good, the resultant cooperation so satisfying that the school is now being taken to other districts throughout the city. In the neighborhood clinics, the branch societies, in the hospitals, in any hall or meeting place which twenty or more physicians designate as a location, the school is established and the sessions organized to meet the convenience of the applicants.

This subject was the topic of discussion at this morning's meeting, and the speaker regrets that time does not permit the reading of the

three months' curriculum, most comprehensive and ideal.

We had rather expected that the sophisticates amongst the profession would look somewhat askance at our program of post-graduate education. Very much to the contrary has been the case, the school is going even stronger than it did in the negro areas and experience, to date, seems to guarantee post-graduate training a prominent place in our program.

The Technical School.—The second development referred to has to do with technical training. The volume of the survey work, combined with a restricted budget, made it extremely difficult, even impossible, to supply technical help. We needed x-ray technicians for our machines, laboratory technicians to make the thousands of sputa examinations incidental to the survey. As a natural sequence, therefore, with the thought of both using and training student help, came the x-ray technicians' school and the laboratory technicians' school. These schools serve a dual purpose, economy and education. Worthy young people are trained in a useful occupation and each student contributes a year's work to the institution.

Another educational effort consists of issuing a Bulletin, from time to time, presenting a report of the institutional activities and the results accomplished. The last, and most recent number, written by Dr. Richard Davison, the chest surgeon on the Consulting Staff, is virtually a complete textbook, and should be read and studied by every one interested in the surgical aspect of tuberculosis.

Postgraduate work has extended beyond the confines of Illinois, or our own country. At all times, there have been two or more doctors from some foreign country to study.

It is only just and fair to briefly refer to the recent vicious criticism of the Sanitarium, and the Board of Directors. The two investigating committees, one consisting of six members of the Restaurant Men's Association, to investigate the food and diets, and the other of three out-of-town non-prejudiced tuberculosis sanatorium superintendents, to investigate the medical care, both brought in very acceptable, if not complimentary reports. These reports were never published as the criticisms and misrepresentations were simply a camouflage to screen a far deeper sinister objective which, as time passes, will become more and more evident and lucid to all.

The reference to age, repeated and repeated, is true, but ignores the fact that with age and grey hair is associated knowledge and wisdom.

Finance.—At a round table discussion on finance, our eyes glittered and our hands shook. Millions! Where do they get them and how? All we've ever been able to get is a crust and a promise. Our appropriation, such as it is, barely suffices for the routine care of the 1,220 bed patients in the Sanitarium and the 12,256 patients in their homes. For the rest we've had to depend on outside support. When our first survey attempt hung in the balance, the Tuberculosis Institute came to the rescue. When we needed clothes, milk and extra rations for our clinic patients, the Illinois Club for Catholic Women answered the call. I could go on and on.

Quite recently the federal government heard the call and stepped into the scene as the fairy godmother. Through her faithful ministers, Dr. Hilleboe of the U. S. Public Health Service, Dr. Cross of the State Department of Public Health, Chicago's portion of the federal grant under Bill No. 417 has just been made available to us; no inconsiderable sum! Quite a respectable sum, in fact, sixty thousand dollars, the identical sixty thousand, the self same sixty thousand, dollar for dollar, that, according to one of the newspapers, was sent to me personally year after year after year.

What the newspapers say must be true. I got so I believed it myself. Sixty thousand and year after year! I read it, heard it, thought and dreamt about it and felt myself rich. Year after year after year! I must be Rockefeller. Then disillusion! Imagine how I felt when I learned it was all a mistake! Picture my chagrin when the first checks drawn against the sixty thousand, *my* sixty thousand, were mailed out from Springfield a week or so ago; not to me, but to a dozen or so brand new employes who had been with the institution no more than a month!

Having briefly and inadequately reviewed the three-point program, with its sequential activities, the writer will conclude by indicating, based on thirteen years of service, some of the de-

ficiencies and requirements of the Sanitarium:

1. There always has been, and still is, a crying lack of infirmary beds.

2. The personnel, medical and nursing, as well as the non-professional staff, is far inadequate and woefully underpaid.

3. Inadequate funds, which is basic, and absolutely essential for expansion and adequate maintenance.

It has been suggested in a recent report that Chicago needs 2,747 more beds. Using Jessamine Whitney's construction cost figure of $3,500 per bed, the building charges alone would run to $9,000,000. Add maintenance on a $4.00 per diem basis, $4,000,000 annually, and our present expenditure for Sanitarium and clinics of approximately two and one-half million seems meager indeed. Meager as it is, we have been unable to better it, and in the face of our experience the thirteen million still looks pretty far away, and very hazy. Somewhere between the two and one-half million and thirteen million lie the outer limits of physical expansion, and where this expansion ends field pneumothorax begins.

4. Adequate legislation, an amendment to the existing laws making it possible to forcibly segregate the open case of tuberculosis, regardless of age. Such a measure is absolutely necessary if tuberculosis is ever to be controlled or eliminated.

5. For many reasons, it would seem advisable to seriously advocate repealing the Glackin Law, and for the City of Chicago to deed, or sell, the Sanitarium to the State, and make it one of the proposed State Tuberculosis Hospitals.

PILONIDAL SINUS

Statistical Review of 300 Cases

MAJOR JOSEPH RAIDER, M. C., U. S. ARMY
AND
LT. COL. SHERMAN E. ANDREWS, M. C., U. S. ARMY

This is a statistical review of the first 300 consecutive cases of pilonidal sinus since the opening of the hospital at Camp Polk, Louisiana. We will not deal here with the etiology or symptomatology of this condition nor discuss the embryologic origin. The current literature treats this subject adequately,[1, 2, 3, 4, 5, 6]. Suffice it to say that with the exception of one negro and one American Indian, this group comprised young white males in their early twenties and at their physical prime. Nearly two-thirds of these men attributed the beginning of their symptoms to some episode in the army; such as landing flat on one's seat from a parachute jump, riding in a jeep, and in general traveling on unimproved roads and cross country. (See Table 1 below).

Table 1
Occurrence of symptoms in 260 cases

Occurrence of Symptoms	No. of Cases	Percentage
Before Induction	97	37
After Induction	163	63
Total	206	100

Fifty men in this group had previously been operated on in civilian and army hospitals 68 times. Twenty-five of these were treated one or more times (one as many as six times) by incision and drainage. The remaining half in this group had a total of 26 excisions. On admission all required treatment, and their known combined past loss of time in hospitals already amounted to 2,195 man days, or an average of 43 *days* per man. (See Table 2 below).

Table 2
50 cases previously operated

Type of Operation	No. of Cases	No. of Operations
Incision & Drainage	25	42
Excision*	25	26
Totals	50	68

*Type of closure difficult to ascertain.

Our treatment of pilonidal sinus has been essentially the same as that outlined by the Surgeon General's Office[7]. Simple cysts and sinuses were treated conservatively. The infected cases, or those with frequent recurrent attacks, were either incised and drained or excised. Of the entire group, 283 cases were operated upon.

As will be noted in Table 3, 80 cases were incised and drained and 203 cases were excised. The type of closure in the excisions is outlined in Table 4. Roughly, three-fourths were closed by primary closure and the rest equally divided between partial closure and open packing. The material used was chromic catgut No. 0 for deep sutures and black silk No. 1 for the approximation of the skin. These sutures were removed on the 8th day. Bowel movements were discouraged during this period, and the patient remained in bed for an additional week. Post-operative treatment was routine with this exception, patients

were given ascorbic acid, 150 mgm. daily, for the first two weeks. This was for the purpose of creating a more firm scar,[8,9,10,11].

Table 3

Type of operation in 283 cases

Type of Operation	Kind of Closure	Number of Cases	Percentage
Incision & Drain.		80	28.3
Excision	Primary	151	53.3
Excision	Partial	26	9.2
Excision	Open Packing	26	9.2
Totals		283	100

Table 4

Type of closure in 203 excisions

Kind of Closure	No. of Cases	Percentage
Primary	151	76
Partial	26	12
Open Packing	26	12
Total	203	100

Hospitalizations. The hospitalization period for the respective groups appears in Table 5 below.

Table 5

Post-operative period of 283 cases

Type of Operation	Number of Cases	Post-operative Total Days	Avg. period in days
Incision & Drainage	80	1963	27
Primary	151	7260	48
Partial	26	1733	66.7
Open	26	2550	98

As will be noted, the combined total number of days spent by the 80 men, whose cysts were merely incised and drained, was 1,963, or an average of 27 *days* per man. The primary closure group of excisions totaled 7,260 days, or an average of 48 *days* per man. The partial closure group totaled 1,733 days, or an average post-operative hospitalization period of 66.7 *days*. A total of 2,550 days of hospitalization for the group with the open packing resulted in an average of 98 *days* post-operatively.

Pilonidal specimens. We found laboratory reports with measurements on 174 pilonidal specimens. The average specimen measured 6.4 cm. long, 2.6 cm. wide and 1.6 cm. deep. The largest single specimen in the series was 10.5 cm. by 5 cm. by 2.5 cm. However, we have a convalescent on the ward now, not included in this series, whose section of tissue removed measured 14 cm. by 4.5 cm. by 1.2 cm.

Complications. The most frequent post-operative complications, in the order of occurrence, were as follows: — (1) infection, (2) breakdown in scar, (3) hematoma. (See Table 6).

Table 6

Complications in 203 cystectomies

	No. Cases	Infection	Breakdown	Hematoma	No. Complication	%
Primary Closure	151	38	8	3	49	32
Partial Closure	26	3	5	—	8	30
Open Packing	26	1	1	—	2	7
Totals	203	42	14	3	59	
Percentage	100	20	7	1	29	

In all we had 42 infections, 14 breakdowns in scar, and 3 hematomas, a total of 59 complications. In the primary closure group alone, we had 38 infections, 8 breakdowns and 3 hematomas, a total of 49 complications, amounting to 32 per cent. This was the highest incidence in complications when compared with the other methods. In the partial closure group we had 3 infections, 5 breakdowns in scar and no hematomas, adding up to 30 per cent complications. In the open packing procedure there was one gross infection and one subsequent breakdown with a 7.5 per cent complication incidence.

It is interesting to note that the 42 cases which developed infections spent an additional 1,093 days in the hospital, or an average of 26 *days* beyond the prescribed six weeks period.[7].

Use of Sulfonamides. We have the records of 27 primary closures in which 5 Gms. of sulfanilamide was introduced into the wound with an incidence of 11 infections and 1 hematoma. This is a 44 per cent incidence. Similarly, when in 124 cases of primary closure no sulfanilamide was employed the incidence was reduced to 23 percent. Others, [12], [13], too, have found the use of sulfanilamide discouraging. Because of this

the introduction of sulfanilamide into the wound has been discontinued. (See Table 7)

Table 7
Incidence of infections with and without the use of sulfanilamide

	No. of Cases	No. of Infection	Percent Infection
Primary Closure With Sulfanilamide	27	12	44
Primary Closure Without Sulfanilamide	124	29	23

Time Loss. As will be noted in Table V, the average time spent in the hospital by the soldiers in this series of cases was as follows:— 27 days in simple incision and drainage, 48 days in the excisions with primary closure, 66.7 days in the excision with partial closures, and 98 days in the excisions with open packing. The total post-operative period for the operative group (283 cases) was 13,026, or an average of 46 days per man. However, when we consider the entire 300 men (there were 17 non-operative cases) the time spent in the hospital increases to 15,531 days or an average of 51.6 days per man. When to these figures is added the known past loss of time of 2,195 days for the 50 men with previous hospitalizations we get a new grand total of man days lost in army hospitals of 17,726 or an average of 59 *days* per man. (See Table 8) For practical purposes we may say that these 300 men had each lost 2*months* of service. Considering the many army hospitals throughout the country and abroad, and the large number of pilonidal cases that they too have been handling, the loss in man power takes on a greater significance than has heretofore been attributed to this condition.

Table 8
Time loss of 300 cases

Number Cases	Total Post-operative Period	Average Number Days	Total Present Hospital Period	Average Number Days	Total Past & Present Hosp. Period	Average Number Days
283	13,026	46				
300			15,531	51.6	17,726	59

SUMMARY

Three hundred consecutive cases of pilonidal sinus are reviewed. Almost two-thirds of these attributed the beginning of their symptoms to some episode in the army.

Fifty of these cases had operations prior to admission to this hospital; one-half cystectomies, the other half incision and drainage.

Two hundred and eighty-three cases in this series were operated upon; 80 had incision and drainage, 151 primary closures, 26 partial closures, and 26 open packing.

Simple incision and drainage required the shortest average post-operative hospitalization period (27 days); excision and open packing the longest (98 days).

The largest incidence in complications (32%) occurred in the primary closure group. Paradoxically, this same group had the shortest post-operative hospitalization period (48 days).

The introduction of appreciable amounts of sulfanilamide into wounds of primary closure carried with it a 44 per cent infection incidence as compared with 23 per cent where none had been used.

CONCLUSIONS

1. Army life predisposes to pilonidal sinus infection.

2. Pilonidal sinus in the soldier constitutes a great problem in the army from the standpoint of the enormous time loss from duty.

3. The trend in the treatment of pilonidal sinus should be conservative. However, in cases where excision is indicated, the primary closure method promises an earlier return to full duty. This procedure is practicable in about three-quarters of the cases coming to surgery.

4. The use of sulfanilamide in any appreciable amount in complete closures carries a high incidence of complications. It should, therefore, not be used.

5. The inability to properly follow up the pilonidal sinus cases in the army greatly reduces the value of this or any other similar statistical review.

REFERENCES

1. Kooistra, H. P.: Pilonidal sinuses; review of literature and report of three hundred and fifty cases. Am. J. Surg., 55: 3-17 (Jan.) 1942.
2. Schute, F. C., Jr.; Smith, T. E.; Levine, Max; and Burch, J. C.: Pilonidal cysts and sinuses. Ann. Surg., 118: 706-713 (Oct.) 1943.

3. McCutchen, G. T.: Pilonidal sinus. Ann. Surg., 118: 430-437 (Oct.) 1943.
4. Wolderberg, S. C.; Sharpe, W. S.: Surgical treatment of pilonidal cysts; a study of 100 consecutive cases of excision and primary closure. S.G.O. 76: 164-170 (Feb.) 1943.
5. MacFee, W. F.: Pilonidal cysts and sinuses; a method of wound closure; review of 230 cases. Ann. Surg. 116: 687-699 (Nov.) 1942.
6. Pickett, W. J.; Beatty, A. J.: Pilonidal cysts in the army; a report of 30 cases occurring in 97 days at Ft. Sill, Okla. Am. J. Surg. 61: 375-378 (May) 1942.
7. S. G. O., Circular Letter 169, 25 September 1943, Subject: Pilonidal cyst and sinus, and T. B. MED 89, 2 September 1944, Subject: Pilonidal Cyst and Sinus.
8. Lund, C. C.; Crandon, J. H.: Nutrition as it affects wound healing; Med. Cl. N. Am.: 561-566 (Mar.) 1943.
9. Bartlett, M. K.; Jones, C. M.; and Ryan, A. E.: Vitamin C and wound healing; experimental wounds in guinea pigs. Jour. Med. 226: 469-480 (Mar.) 1942.
10. Hunt, A. H.: The role of vitamin C in wound healing. Bri. Jour. Surg. 28: 436-461 (Jan.) 1941.
11. Wolfer, J. A.; Hoebel, F. C.: The significance of cevitamic acid deficiency in surgical patients. S.G.O. 69: 745-755 (Dec.) 1939.
12. Scott, J. V.: Pilonidal cyst, the local use of buffered sulfanilamide in primary closure. Ann. Surg. 117: 191-197 (Feb.) 1943.
13. Theis, F. V.; Rusher, M. W.: The pilonidal sinus; sacrococcygeal cyst teratoma. S.G.O. 79: 482-489 (Nov.) 1944.

TEAMWORK IN MEDICINE

The Woman's Auxiliary as a Member of the Team

FRANK P. HAMMOND, M.D.
CHICAGO

It has been suggested that the women of the Auxiliary would be interested in a review and re-evaluation of the professional ethical code for the purpose of better understanding and added inspiration, since all the activities of the Woman's Auxiliary are inherently subject to and should be influenced by the principles of the medical ethical code. Therefore, may we confine our discussion of "Teamwork in Medicine" to those paragraphs from the "Principles of Medical Ethics of the American Medical Association" that seem to be applicable to the doctor's wife and the Auxiliary's functions and activities.

It perhaps is unnecessary to remind you ladies of the Auxiliary, but it is of particular significance that the present day medical code of ethics is based primarily on the enunciation of medical-public relations by Hippocrates, known as the Father of Medicine, in the year 400, B.C.

The present day dictum may be summed up in the first section of Chapter 1 of the "principles":

"A profession has for its prime object the service it can render to humanity; reward or financial gain should be a subordinate consideration. The practice of medicine is a profession. In choosing this profession an individual assumes an obligation to conduct himself in accord with its ideals."

When the principles of medical ethics are fairly well understood and digested by the women of the Auxiliary, it appears logical and obvious that their discretion and judgment will automatically dictate the proper demeanor and course of action the Auxiliary and its individual members should assume when confronted with an issue or problem which might border on a question of violating a medical policy or procedure.

With the object in mind of bringing to your attention some of the "principles" that may well be considered relevant for doctors' wives to become better acquainted with as a guide to their conduct in dealing with medical matters, let us now discuss together a few sections from the "Code".

"Patience and delicacy should characterize all the acts of a physician. The confidence concerning individual or domestic life entrusted by a patient to a physician and the defects of disposition or flaws of character observed in patients during medical attendance should be held as a trust and should never be revealed except when imperatively required by the laws of the state."

The doctor's wife's place on the "team" in connection with her husband's private practice is readily observed by implication. The doctor's wife should fully understand that her husband, as a physician, is obligated under the ethical code to hold in trust confidences concerning individual or domestic life, defects of disposition or flaws of character entrusted by a patient to him and they should never be revealed to anyone except when required to do so in a court under the law.

"The obligation assumed on entering the profession requires the physician to comport himself as a gentleman and demands that he use every honorable means to uphold the dignity and honor of his vocation, to exalt its standards and to extend its sphere of usefulness. A physician should not base his practice on an exclusive dogma or sectarian system, for 'sects are implacable despots; to accept their thraldom is to take away

Read before the Woman's Auxiliary to the Illinois State Medical Society, Chicago, March 20, 1946.

all liberty from one's action and thought.' (Nicon, father of Galen)."

This precept directs our attention to the exalted and lofty ideals promulgated and accepted by the medical profession and with equal emphasis reveals the over all decorum expected of the physician as a member of society and his responsibility to those he may serve. The doctor's wife must gain genuine pleasure and wholesome satisfaction in the realization of her position as a helpmate to a man whose vocational activities are based upon such a high plane of conduct standards.

It is presumed and expected that members of the Auxiliary in all their activities, whether as individuals or as an organized body, will fully sense the dignity and honor of the medical profession, exalt its standards and assist in extending its sphere of usefulness.

"In order that the dignity and honor of the medical profession may be upheld, its standards exalted, its sphere of usefulness extended, and the advancement of medical science promoted, a physician should associate himself with medical societies and contribute his time, energy and means in order that these societies may represent the ideals of the profession."

Faithfulness and encouragement by the doctor's wife may be the "guiding star" to influence active participation of her husband in medical society meetings. Likewise, the lady member of a doctor's family should join the ranks of the Woman's Auxiliary and contribute her time, energy and means in order that the Auxiliary may extend its sphere of usefulness as a public representative of the ideals, policies and procedures of the profession.

"A physician should be an 'upright man, instructed in the art of healing.' Consequently, he must keep himself pure in character and conform to a high standard of morals, and must be diligent and conscientious in his studies. 'He should also be modest, sober, patient, prompt to do his whole duty without anxiety; pious without going so far as superstition, conducting himself with propriety in his profession and in all the actions of his life." (Hippocrates)."

None-the-less important in connection with decorum and propriety is the exemplified demeanor of the women of the Auxiliary.

"Solicitation of patients by physicians as individuals, or collectively in groups by whatsoever name these be called, or by institutions or organizations, whether by circulars or advertisements, or by personal communications, is unprofessional. . . . . It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement, or by furnishing or inspiring newspaper or magazine comments concerning cases in which the physician has been or is concerned. All other like self-laudations defy the traditions and lower the tone of any profession and so are intolerable. The most worthy and effective advertisement possible, even for a young physician, and especially with his brother physicians, is the establishment of a well-merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct."

A devoted, patient and cooperative wife will do much in assisting her husband to establish a well-merited reputation for professional ability and fidelity.

"Physicians should expose without fear or favor, before the proper medical or legal tribunals, corrupt or dishonest conduct of members of the profession. All questions affecting the professional reputation or standing of a member or members of the medical profession should be considered only before proper medical tribunals in executive sessions or by special or duly appointed committees on ethical relations. Every physician should aid in safeguarding the profession against the admission to its ranks of those who are unfit or unqualified because deficient either in moral character or education."

This paragraph exemplifies purity, valor and justice.

"Experience teaches that it is unwise for a physician to treat members of his own family or himself. Consequently, a physician should always cheerfully and gratuitously respond with his professional services to the call of any physician practicing in his vicinity, or of the immediate family dependents of physicians."

Unselfish gratuitous professional service, one to the other, illustrates a bond of true devotion and genuine friendship.

"In serious illness, especially in doubtful or difficult conditions, the physician should request consultations. In every consultation, the benefit to be derived by the patient is of first impor-

tance. All the physicians interested in the case should be frank and candid with the patient and his family. There never is occasion for insincerity, rivalry or envy, and these should never be permitted between consultants."

It should be ever kept in mind that the patient's interests and welfare supersede all other considerations.

"The physician, in his intercourse with a patient under the care of another physician, should observe the strictest caution and reserve; should give no disingenuous hints relative to the nature and treatment of the patient's disorder; nor should the course of conduct of the physician, directly or indirectly, tend to diminish the trust reposed in the attending physician. In embarrassing situations, or wherever there may seem to be a possibility of misunderstanding with a colleague, the physician should always seek a personal interview with his fellow."

Lay-education and public goodwill can be obtained and enhanced only when professional misunderstanding is kept within the ranks of the profession and is amicably resolved by and between the physicians involved. Likewise, the Auxiliary in its intercourse with the public should observe caution and reserve in situations that might tend to diminish the trust reposed so graciously in the medical profession.

"A physician should avoid making social calls on those who are under the professional care of other physicians without the knowledge and consent of the attendant. Should such a friendly visit be made, there should be no inquiry relative to the nature of the disease or comment upon the treatment of the case, but the conversation should be on subjects other than the physical condition of the patient."

To achieve teamwork in harmony with this ethical stipulation, Auxiliary members can see the wisdom of adhering to the admonitions as strictly as is expected of their husbands.

"When a physician does succeed another physician in the charge of a case, he should not make comments on or insinuations regarding the practice of the one who preceded him. Such comments or insinuations tend to lower the esteem of the patient for the medical profession and so react against the critic."

Criticism is a tree of unfortunate fruitage. Criticism of itself assumes superiority and often reflects as a boomerang the faults and failures of one's own deeds.

"Whenever there arises between physicians a grave difference of opinion which cannot be promptly adjusted, the dispute should be referred for arbitration to a committee of impartial physicians, preferably the Board of Censors of a component county society of the American Medical Association."

They may never arise, but in the event of unadjustable differences of opinion between officers of the Auxiliary, in connection with policies and procedures to be adopted, the problem could well be referred to the Medical Advisory Committee.

"When a patient is referred by one physician to another for consultation or for treatment, whether the physician in charge accompanies the patient or not, it is unethical to give or to receive a commission by whatever term it may be called, or under any guise or pretext whatsoever."

"It is unprofessional for a physician to dispose of his professional attainments or services to any lay body, organization, group or individual, by whatever name called, or however organized, under terms or conditions which permit a direct profit from the fees, salary or compensation received to accrue to the lay body or individual employing him. Such a procedure is beneath the dignity of professional practice, is unfair competition with the profession at large, is harmful alike to the profession of medicine and the welfare of the people, and is against sound public policy."

This "principle" is presented for your general information in connection with violation of the ethical code by physicians granting or accepting commission or profit to or from sources extraneous to their recognized ethical private practice of medicine on the free-for-service basis.

"Physicians, as good citizens and because their professional training specially qualifies them to render this service, should give advice concerning the public health of the community. They should bear their full part in enforcing its laws and sustaining the institutions that advance the interests of humanity. They should cooperate especially with the proper authorities in the administration of sanitary laws and regulations. They should be ready to counsel the public on

subjects relating to sanitary police, public hygiene and legal medicine."

One can see from reading this "principle" that it is the ethical duty of physicians to acquaint the public by all available means with scientific and reliable health information in the interests of public welfare. Lay-education programs on health and sanitation subjects, sponsored by the Auxiliary, are in direct line with this ethical dictum. Medicine is not organized for shorter hours and greater pay, *but* rather to become better equipped for service to mankind and the advancement of medical science.

"While the foregoing statements express in a general way the duty of the physician to his patients, to other members of the profession and to the profession at large, as well as of the profession to the public, it is not to be supposed that they cover the whole field of medical ethics, or that the physician is not under many duties and obligations besides these herein set forth. In a word, it is incumbent on the physician that under all conditions, his bearing toward patients, the public and fellow practitioners should be characterized by a gentlemanly deportment and that he constantly should behave toward others as he desires them to deal with him. Finally, these principles are primarily for the good of the *public,* and their enforcement should be conducted in such a manner as shall deserve and receive the endorsement of the community."

Equally important is the recognition by the Auxiliary and its membership that the comments herein set forth do not cover the whole field governing actions and decorum. The Doctor's Ladies should ever keep in mind that these principles are primarily for the good of the public and adherence to them in the course of Auxiliary activities should be performed in such a manner as shall deserve and receive the endorsement of the community.

It can now be seen that in all Auxiliary dealings with the public on matters designed to further lay-education in connection with the practice of medicine, the policy and procedure should in every respect be conducted within the limits imposed by the professional ethical code.

Naturally, the ethical code principles apply to the Auxiliary *only* when its activities are related to the sphere of professional practice of medicine.

Loyalty, harmony and teamwork should be the Auxiliary's aim and accepted as its duty and obligation.

Whenever in doubt with respect to any contemplated Auxiliary activity, or lay-education project that might even approach violation of the code or result in embarrassment to constituted medical policy, the proper procedure would be to seek counsel from the Auxiliary's Advisory Committee.

May we now repeat together your LOYALTY PLEDGE:

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

PSEUDO-SPIROCHAETES IN BLOOD

Lt. Colonel G. Howard Gowen*
Medical Corps, Army of the United States

We became interested in pseudo-spirochaetes while studying the epidemiology of infectious hepatitis in North Africa during the fall and winter of 1943-44. With the occurrence of large numbers of cases of epidemic hepatitis the attention of many laboratory workers was unavoidably focused on darkfield examinations of blood for diagnostic purposes. There was considerable preliminary confusion due to the finding of artifacts which simulated spirochaetes. The existence of such objects has been known for years[1], but most of us probably have had little practical experience with them until the recent outbreak of jaundice became evident. Since a large number of laboratory observations were made by us, it was thought that a capitulation of our findings might be pertinent and apropos at this time, and of value to those who may have yet to personally encounter these deceptive entities.

The appearance of these pseudo-spirochaetes is depicted schematically in Figure 1. The drawings have been made as nearly as possible to scale with the diameter of the red blood cells representing 8 microns. The forms shown are representative of the different types seen in 400

*Now separated from the Army and with the Division of Cancer Control, State Department of Public Health, Springfield.

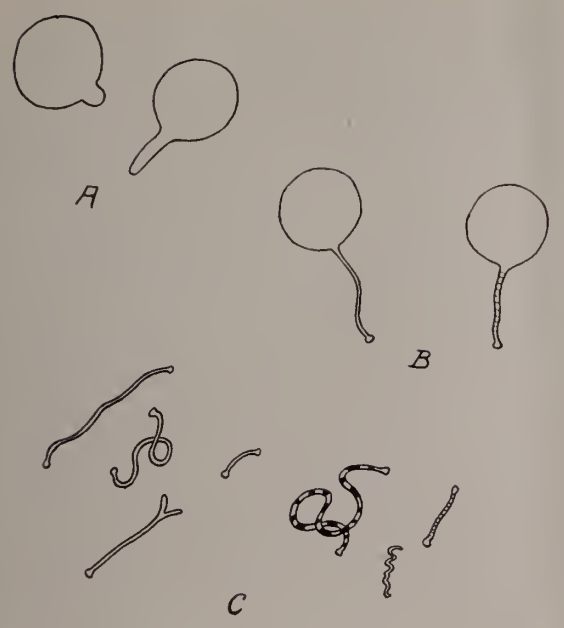


Figure 1.

A. Evaginations from red blood cells.
B. Filamentous forms attached to red blood cells.
C. Free floating forms showing branching, beading, striations, and spiral characteristics.

darkfield examinations of blood serum. They varied in length from approximately 4 to 20 microns, and in width from 0.25 to 0.5 microns. Some reflected light well and appeared quite silvery while others were shadowy in outline. In general they were homogeneous with no definite structure. Some, however, had a beaded appearance and others seemed to possess striations. Practically all had bulbous ends and sometimes the ends were of a hooked appearance. There was no true spontaneous motility. Movement was always in the direction of the flow of liquid under the cover slide. There was a wavy type of undulation, and rotation was of common occurrence. Occasionally forms were seen having spirals of an irregular nature. When this occurred the pseudo-spirochaete would twist and turn in a most uncoordinated manner.

Attempts to stain these bodies either by Giemsa or the Fontana-Tribondeau impregnation method were generally unsuccessful. This may have been due to distortion which rendered them unrecognizable. When a typical form was seen it had much the same appearance as under the darkfield — homogeneous, no definite structure, bulbous ends, and definitely not coiled.

These forms are consistently seen in cases of jaundice, cases in the prodromal stages before jaundice, and in cases that do not go on to jaundice. They apparently have no relationship directly to the degree of jaundice, and the numbers present vary greatly in cases of similar severity. As the cases convalesce these forms decrease markedly in number or disappear.

These forms may be found in normal serum, but not as consistently, and when present they are not usually as numerous. In a study of 176 blood sera from apparently normal individuals we found 20 or 11 per cent positive. In 15 of these in fluid under the cover slip we found only from one to four. In the other five they were more numerous. We have also at times seen them in serum from penile lesions.

We did not limit our observations to humans in regard to these forms but also studied the serum of lower animals. We found them in guinea pigs injected with blood or serum from human cases of jaundice, and also in normal guinea pigs. We found them in injected and normal white mice. They were present in tame rabbits and in wild rats. Occasionally there would be a negative but the vast majority were positive. We did not find them in serum from a mule and a sheep, but this is not significant since an insufficient number of animals was used.

Some observations on the properties of these forms in serum were that centrifuging apparently does not concentrate them; refrigeration itself does not affect them; incubation leads to a rapid disappearance as a rule; standing at room temperature they disappear slowly. In sterile serum not refrigerated, we found them up to eleven days. In non-sterile serum, not refrigerated, they disappeared usually in four to five days.

Our studies support the belief that they are in some way associated with changes in the red blood cells. If blood is drawn in the manner prescribed for a red blood count, and before shaking the pipette, a drop is examined under darkfield, many of the wavy, shadowy forms are seen attached to the red blood cells. They are, however, apparently more numerous in jaundice cases than in normals. If a similar examination is

made after shaking the pipette, these forms are no longer visible. We have not seen the brighter appearing forms, however, under these conditions. In the presence of white cell counting fluid we found none of these forms in jaundice cases or normals.

While most of these forms when attached to red blood cells appear as slender bright or faint appearing wavy filaments, not uncommonly we have noted what appeared to be an evagination of the red cell at a certain point. These evaginations have been short and relatively thick in some instances, and longer and more slender in others (See A in Figure 1). It is thought that the longer filaments may be extensions of these primary evaginations, and that they eventually separate producing the wavy pseudo-spirochaetes. If this theory is correct then some change in the surface tension must occur on the surface of the red cell permitting the extrusion of some of the cellular contents at a certain point which goes through the steps cited above eventually becoming detached filaments. That these filaments are the result of the loss of cellular contents by some of the red cells is further suggested by the fact that normal and diminutive sized red cells are commonly encountered which do not reflect light in the manner of the normal cell and which appear more or less as "ghost" forms.

In serum it is not uncommon to see these forms attached to red blood cells. Not infrequently they appear to contract and then break off transversely, but not into particles necessarily of equal size. After this separation they go through active gyrations, show coiling and at this time more nearly simulate true spirochaetes. In blood cultures we have found them attached to red cells after two weeks incubation.

Apparently there is something about the presence of icterus that favors the development of these pseudo-spirochaetes. This has also been observed by Kuzell[2]. In addition he noted they were more numerous in a miscellaneous group of acute febrile patients than in a group of afebrile surgical convalescents.

SUMMARY

1. We have presented the observed characteristics of pseudo-spirochaetes found during 400 darkfield examinations of blood serum.

2. These artifacts are not only present in the blood of humans, but also occur in that of guinea pigs, white mice, tame rabbits and wild rats.

3. Our studies lead us to believe that these free floating forms result from an extrusion of cellular contents of red blood cells which extends into a filamentous form and subsequently becomes detached.

4. An increase above normal in the bilirubin content of the blood seems to favor the development of these artifacts.

REFERENCE

1. Zinsser, Hans and Bayne — Jones, Stanhope, A Textbook of Bacteriology, Eighth Edition, D. Appleton — Century Company, New York (1939), pp. 687-688.
2. Kuzell, William C., Artifact Spirochaetes in Infectious Hepatitis, The Medical Bulletin of the North African Theater of Operations, Vol. I, No. 2, pp. 24-25, February, 1944.

Acknowledgement is made of the valuable technical assistance of F. C. Heneman, Jr., Technician Fourth Grade.

GRANULOCYTOPENIA FROM THE COMBINED USE OF THIOURACIL AND SULFONAMIDES

Samuel G. Taylor, III, M.D.
CHICAGO

Slight leukopenia with relative lymphocytosis is not an unusual finding in a patient to whom thiouracil is being administered. However, agranulocytosis apparently is uncommon and occurs less frequently now that smaller doses of the drug are given. Kahn[1] has recently reported a case of fatal agranulocytosis in a patient receiving thiouracil. Ashwood[2] reported a case of neutropenia in a patient given sulfamerizine during the administration of thiouracil. We have recently observed this type of reaction when sulfadiazine was given along with thiouracil:

REPORT OF CASE

A 49 year old woman, who had had a thyroidectomy for exophthalmic goiter in 1937, developed an enlargement of the remaining thyroid tissue in the left lobe and signs of thyrotoxicosis in January 1943. The B.M.R. was +23%. With iodine the symptoms of thyrotoxicosis disappeared and the B.M.R. returned to normal but the thyroid tissue increased in size and became unsightly. On omission of iodine her symptoms recurred and the B.M.R. rose to +25%. Thiouracial 0.4 Gm daily was started May 22, 1944. This was followed by a drop in B.M.R. and disappearance

From the Department of Medicine, University of Illinois, and Presbyterian Hospital, Chicago.

of symptoms of thyrotoxicosis. The W.B.C. fluctuated between 4,300 and 5,850 per cu. mm. and the differential showed a slight lymphocytosis. On August 14, 1944 thiouracil was omitted as the B.M.R. was —10%, the palpable thyroid tissue had decreased to about 1/3 its former size and the patient felt normal.

She returned November 1, 1944 with recurrence of symptoms of thyrotoxicosis. The B.M.R. had risen to +18%. Thiouracil 0.1 Gm. once a day was started. In the weeks following the B.M.R. dropped to normal and the W.B.C. remained between 4,000 and 4,500 per cu. mm. She entered the hospital January 20, 1945 because of a thrombophlebitis of the left leg that had been present for one week. She had been taking 0.1 Gm. thiouracil daily since November 1, 1944. The same dose of thiouracil was continued and sulfadiazine 1 Gm. every 4 hours was started. Dicumerol 0.1 Gm. daily was also given. The following day the W.B.C. were 4,500 but the second day they dropped to 2,300 per cu. mm. with 33% segmented neutrophils, 56% lymphocytes and 8% monocytes. The thiouracil and sulfadiazine were omitted, the total of the latter given being 10 Gm. Twenty-four hours after omission of both drugs the W.B.C. were 2,900 per cu. mm. with 5% stab forms and 35% segmented neutrophils. There later the W.B.C. had risen to 5,900 with 60% segfor the next five days and the patient was dismissed from the hospital without medication. Two weeks was no further change in the total or differential count mented neutrophils, 4% juveniles, 4% stab forms, 30% lymphocytes and 2% monocytes. Thiouracil .1 Gm. was restarted February 13, 1945 and the white blood count and differential has remained normal since despite continual administration of the drug in the above dose.

CONCLUSION

The administration of sulfonamides to a patient who is taking Thiouracil may increase the danger of producing granulocytopenia.

REFERENCE

1. Kahn, Julius, and Robert Stock. Journal American Medical Association 126: 358 (1944).
2. Ashwood, E. B. Journal Clinical Endocrinology 4: 229 (1944).

TUBERCULOSIS WINS THE PEACE

Austria — There were 3,848 new cases of tuberculosis in Vienna during the last six months, compared with 3,355 in the same six months of the previous year and 2,148 deaths in this period compared with 1,301 in the 1944 period from this cause.

Czechoslovakia — Czechoslovakia has more than 180,000 tuberculosis patients. The most serious problem is tuberculosis among people about 40 years of age, the mortality at that age being high. This is attributed to the fact that so many parents surrendered their rations to children during the war.

France — Tuberculosis has become the greatest single disease problem of France, and the possible measures of prevention are considered backward and inadequate.

Greece — According to data recently compiled by UNRRA 95 per cent of the Greek population, reported to be about 7,000,000, suffer from malnutrition. This means a prevalent susceptibility to diseases, particularly those that are the country's greatest scourges — tuberculosis and malaria. It means too a serious decline in the birth rate and a rise in infant mortality boding ill for the country's future.

Hungary — Venereal disease is the most important health problem in Hungary followed by tuberculosis and rickets in children. The infant mortality rate, which was 13.1 per cent in 1938, has risen to 30 per cent.

Italy — The worst potential problem is typhus; the worst actual problems are tuberculosis and infant mortality. Moreover, as throughout a world tainted by war, venereal disease is a grave complication.

For the vast majority of Italians, there is generally enough — but never too much — to eat. And, since it is a general truth that the curve of tuberculosis follows the curve of living costs in Italy, there is a very definite health factor in the chaotic economy that decrees that a pound of sugar costs $2 on the black market, which is the only place where it can be obtained.

When it comes to the statistics of disease, tuberculosis is possibly most alarming. From 1940, the death rate has increased steadily throughout 1944. Last year an average of more than ten persons died of tuberculosis every day in Rome. The rate was 119 per 100,000 population in 1940 and 253 per 100,000 last year.

The explanation, here as elsewhere, is lack of proper foods, notably fats and milk, and unsatisfactory living conditions in general.

Netherlands — The number of tuberculosis patients soared during the war. Available statistics show a rise in deaths caused by this disease of 300 per cent during the first six months of 1945. In January this year the number was still double that of 1940.

Turkey — According to most medical opinion tuberculosis, malaria and venereal diseases constitute the main scourges affecting Turkey. Sanatoria have been built in recent years where up-to-date treatment is administered, but more are needed.

The above reports, considered substantially correct, were taken from the New York Times of March 11, 1946. They clearly show that among the victors of both war and peace — tuberculosis unfortunately has won itself a place.

Physical Medicine Abstracts

John S. Coulter, M.D.

THE VALUE OF MASSAGE IN RHEUMATOID ARTHRITIS

Frank Hopkins, M.D., Hot Springs, Virginia
In VIRGINIA MEDICAL MONTHLY, 73;2;62
February, 1946

The myositis that accompanies chronic rheumatism and chronic gout is characterized by a generous cellular exudate which soon produces induration and requires much treatment for its dissipation; on the contrary, in the myositis of rheumatoid arthritis, there is a more or less noncellular exudate, which is circumscribed and more easily dissipated. The muscles seem especially sensitive and with the slightest infiltration are subject to painful spasm. Pain is a great factor and probably the greatest factor in undermining the patient's health and morale. Skillful and understanding massage will keep the pain in abeyance and thereby add the greatest boon to the patient's welfare.

As long as general massage is ordered without specific instructions to the operator relative to the pathology, massage will not have the place in the doctor's armamentarium that it deserves.

If any muscle is found acutely inflamed, massage is postponed and moist heat is applied.

The form of massage used to dissipate the infiltrated areas is classified as friction or pressing and consists of the use of the tips of the three middle fingers or thumb, making gradually increasing pressure and applying circular movement. This is kept up until the operator feels the tissues give or relax, which means the treatment is effective. Whether the operation is to be carried further at this seance will depend upon the judgment of the operator. At this stage, it may be desirable to finish the treatment with effleurage and kneading (petrissage).

Proper massage in rheumatoid arthritis will help to keep the muscles free of exudates and thereby lessen pain and help to prevent contractures and make for a longer life of activity and freedom from complete invalidism.

ORTHOPAEDIC LESSONS OF THE WAR

W. Rowley Bristow, F.R.C.S.
Late Brigadier, Consultant in Orthopaedic Surgery to the Army
In JOURNAL OF THE ROYAL ARMY MEDICAL CORPS, 85;6;275
December, 1945

Many surgeons are still not convinced that early knee movement is necessary in treating a fractured femur, but there can be no two opinions about its value in the management of injuries of the fingers and hand and, to a less extent, the foot.

There has been a great advance in treatment, both in the British and American Armies, from the appreciation of the fact that a splinted hand is likely to become a stiff and useless hand. It was common in the early days of the war to meet with hands immobilized in plaster following a fracture of a metacarpal or a phalanx. It was routine to immobilize the foot and leg following a fracture of the os calcis.

A fractured third metacarpal, for instance, splinted as it is by a normal bone on either side, requires protection but surely not an arm and hand and fingers encased in plaster of Paris.

Yet this was a common phenomenon in the early days of the war.

The gospel of early movement for the hand and fingers was finally recognized and its appreciation has saved many limbs from long hospitalization and from disaster. It is one of the lessons which the orthopaedic surgeons preached incessantly. In some hospitals when a patient left with his arm in plaster following an open fracture of the elbow, written on his plaster were the words: "Keep your fingers moving."

It should be put on record that the masseuses who served overseas played a big part in helping to carry out this policy of early movement and rehabilitation. The massage corps did grand work. They stimulated and encouraged patients to try to use their muscles and joints in a way which the overworked M.O. could not do, and just as the Nursing Sisters are deservedly praised for their work in forward areas, so should the physiotherapists, work be equally acknowledged.

Early movement improved the results of the os calcis fracture, never so common as in this war as the result of mine explosions. In the Centres, plaster fixation was generally given up and replaced by rest with the foot elevated on a Braun's frame for four weeks, with the fracture reduced as far as possible, and movement of the forefoot and midtarsus encouraged. No weight-bearing for some sixteen weeks became the standard method. Under the fixation scheme the disability of the fracture was complicated by the adhesions and joint fixation of the whole of the tarsal joints.

CIRCUMSCRIBED POST-TRAUMATIC OSTEOPOROSIS OF THE LOWER ENDS OF THE RADIUS AND ULNA

Joseph Buchman, M.D.

In THE AMERICAN JOURNAL OF SURGERY, 71;2;272
February, 1946

It therefore appeared to the author that the patient was suffering from a diffuse post-traumatic osteoporosis of the entire carpus and adjacent bone structures superimposed upon a previously existing circumscribed post-traumatic osteoporosis of the semilunar bone, otherwise known as Kienboch's disease.

Immobilization in a circular plaster of Paris bandage from the metacarpophalangeal joints to the elbow was advised and applied from time to time over a period of eighteen months from the date of the accident.

Radiographic examination made on April 28, 1942, demonstrated that the diffuse punctate osteoporosis had disappeared.

Gradual mobilization of the wrist and physiotherapy were advised and instituted. A further roentgenographic study two years after the accident demonstrated the above described changes more clearly. Clinically, however, there were residual changes such as pronounced limitation of motion, pain on extremes of motion, tenderness and weakness which were indicative of arthritic changes. The prognosis was therefore poor even though the diffuse post-traumatic osteoporosis had subsided.

HOW TO BRING BENEFITS OF PHYSICAL MEDICINE TO YOUR OWN SMALL TOWN

John S. Coulter, M.D., Chairman, Council on Physical Medicine, A.M.A., and Howard A. Carter, Secretary, Council on Physical Medicine, A.M.A.

In THE MODERN HOSPITAL, 66;2;65
February, 1946

The quality of physical medicine administered is dependent on the personnel of the department, which should be under the supervision of a physician. Our experience indicates that this service is most satisfactory when it is entrusted to a specialist, e.g. a member of the Society of Physical Medicine, a national organization of physicians specializing in this field.

In our opinion the best technician for hospital service is one who has had nurses' training and nursing experience. The suggestion has been made that a physical therapy technician might also serve as x-ray and medical laboratory technician. This combination requires training in three separate technical specialities and thus entails a long period of preparation. If there is not sufficient demand for physical therapy in a small community hospital to occupy the full time of a physical therapy technician, it would be preferable to employ one who has had a nursing background so that she can do part-time nursing.

The physical therapy technician must be thoroughly trained because at times she may have to

administer physical agents according to oral directions given by the consulting specialist. Skill and service of this kind are possible only if she is well qualified and paid a salary equal to that which she can command in the city.

THE FUNCTIONAL ANATOMY OF THE SHOULDER GIRDLE

Daniel P. Quiring, Ph.D., and Erna L. Boroush, Cleveland

In THE ARCHIVES OF PHYSICAL MEDICINE, 27;2;96
February, 1946

1. The shoulder girdle is the result of a long evolutionary process. In each Vertebrate class it adapts the animal for particular functions.

2. The girdle is associated with the axial skeleton through the sternoclavicular articulation. The clavicular and scapular parts are associated through the acromioclavicular articulation.

3. Muscles of the girdle receive their innervation from the eleventh cranial nerve and from the cervical and brachial plexuses.

4. The arterial supply to the girdle is furnished by branches of the axillary artery.

5. The muscles activating the girdle fall into three natural groups: (a) those uniting the girdle with the trunk, (b) those uniting the girdle with the upper arm, (c) those uniting the scapula with the forearm.

6. Injuries of the shoulder girdle occur most frequently at the clavicle. Fracture of the clavicle is more common than dislocation.

THE THERAPEUTIC VALUE OF EARLY PHYSICAL ACTIVITY IN RHEUMATIC FEVER
PRELIMINARY REPORT

Lt. Colonel Harold F. Robertson, M.C., A.U.S., Major Ralph E. Schmidt, M.C., A.U.S., and Captain William Feiring, M.C., A.U.S., Orlando, Florida

In THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES, 211;1;73
January, 1946

This paper is a preliminary report of observations made on 200 patients on whom the diagnosis of acute rheumatic fever was made by the clinical and laboratory criteria recommended by the Army Air Forces. From this study we have been impressed by two things: first, the high incidence of anxiety neuroses, often to a disabling degree; and second, the fact that prolonged bed rest was not necessary for an uncomplicated rapid recovery. Furthermore, early ambulation has greatly reduced the incidence and severity of the anxiety neuroses. The usual clinical and laboratory criteria for judging activity of the disease were not regarded as contraindications for starting early ambulation — the patient's physical comfort was the determining factor. Four case reports are included which illustrate our present program.

We recognize that this study does not warrant any dogmatic conclusions at this time; nor do we advocate indiscriminate physical activity. Nevertheless. it does invite attention to recvaluation of the currently accepted policy of prolonged bed rest, with its disadvantages, in the treatment of acute rheumatic fever.

TYPICAL HEADACHE OF ESSENTIAL HYPERTENSION: ETIOLOGIC CONSIDERATIONS AND REPORT OF NEW FORM OF THERAPY

A. A. Steiner

In Medical Annals of District of Columbia, Washington — p. 531
14:531-582 (Dec.) 1945
Abstracted in
THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, 130;11;745
March 16, 1946

On the premise that recumbency seems to favor production of the cephalalgia, Steiner instructed patients to elevate the headposts of their bed on 10 inch high blocks. Of 12 patients in whom elevation of the head of the bed during sleep was employed, 10 obtained dramatic relief of their complaint. Four patients required oral ergotamine therapy and obtained complete relief after a week's course of medication. In only 1 case was there partial failure. This patient was unable to sleep with more than 5 inch elevation of the head of her bed. Nicotinic acid was prescribed in several cases on the hypothesis that this headache, like migraine, is of a primary vasoconstrictor type. It was without value. Phenobarbital and thiocyanates were used prior to institution of the present therapy.

POSTURE

A. B. Appleton, M.D., Professor of Anatomy, University of London; Professor, Royal Academy of Arts

In THE PRACTITIONER, 156;931;55
January 1946

No attempt can be made here to embark on the wide subject of correction, i.e., of remedial treatment. It must suffice to draw attention to a few salient points. The primary site of disturbance must be ascertained. "Round shoulders" as a rule consist mainly in an undue flexion in the upper part of the thoracic spine. Again, the constant adoption of some posture may lead to changes in the degree of passive insufficiency in muscles; thus the use of high heels leads to an increase of the passive insufficiency of the gastrocnemius muscles, and this may in turn produce strain on the arches of the foot if the high heels are suddenly discarded. If the shoulders are allowed to fall forward the pectoralis muscles shorten, and if attempts are then made to assume a "good" posture without correcting this secondary defect there will be a development of an unusual posture elsewhere, e.g., a lordosis or even a pronation of the foot. If a subject with a long curved back tries to straighten himself without guidance he will bring his head up by a forward displacement of the pelvis and a backward sway above the pelvis. Thus an important problem in the correction of postural deviations consists in avoiding the development of still other postural disturbances.

THE WEAK BACK

Colonel A. B. Walter, R.C.A.C.C.
Consultant in Medicine, D.G.M.S. Directorate, Ottawa

In THE CANADIAN MEDICAL ASSOCIATION JOURNAL, 54;3;255
March, 1946

One type of chronic strain is worthy of separate identification; it is the cause of "postural back-ache" and is of psychic background with the asthenic posture as a physical expression. The trunk is allowed to slump habitually into the position of least effort, the abdominal wall is used unduly for respiratory excursion and its muscles are kept relaxed for this purpose; the slack rectus fails to hold up the pubic arm of the pelvis and lumbar lordosis, often betokened by a "sway back", is the result. A lowered threshold of capacity and undue tendency to lumbar strain is the outcome; this may be a source of pain from no more effort than walking, or still more from continued standing, and its diagnosis is apt to be overlooked because no localized tenderness is found in the back. Its distinction from other types of strain is important because while they are treated by rest this is amenable to treatment on opposite principles. Provided that the psyche is yet plastic, it entails correction of posture and of breathing habits, and restraining of the recti abdominis to properly elevate the pubic bones and lever back the lumbar spine into some semblance of straightness. For mechanical reasons such abdominal exercise should be given in the supine position.

Our present treatment of fibrositis consists in muscular relaxation by heat and rest in the acute stage, heat and directive massage in the chronic; and there seems little doubt that attainment of muscular fitness, whatever that is, increases the resistance of tissues to inroads of the disease.

ELECTROSHOCK CONVULSION THERAPY

W. E. Olson, M.D., Fort Meade, South Dakota

In THE JOURNAL LANCET, 66;3;71
March, 1946

One risk of electroshock therapy is that of fracture of one or more bodies of spinal vertebrae. This risk is very much lessened when the patient is carefully placed and restrained during the convulsion.

Electroshock therapy has been used rather extensively at Fort Meade Hospital. The first treatment was given on June 26, 1945, and since then 38 patients have been treated or are under treatment. A total of 739 treatments have been given, with 649 grand mal and 90 petit mal reactions.

In summary, from our experience with electroshock therapy at Fort Meade we are definitely of the opinion that it is a valuable aid in the treatment of psychiatric cases. In a number of cases the result has been very gratifying.

News of the State

PERSONALS · COMING EVENTS · MARRIAGES · DEATHS

ADAMS COUNTY

The Woman's Auxiliary of the Adams County Medical Society entertained at a luncheon at the home of Dr. and Mrs. J. F. Ross to honor the wives of the medical society members who have returned from service during the war.

BOND COUNTY

J. D. Chittum of Sorento was elected president of the Bond County Medical Society at the annual meeting which was held April 23rd. K. B. Luzader was re-elected as secretary-treasurer.

CARROLL COUNTY

Ralph E. Speer, formerly of Chicago, has opened an office for the practice of medicine in Mt Carroll. He served in the army three years and has been recently discharged with the rank of major and has completed a three-months refresher course at the University of Illinois.

CHAMPAIGN COUNTY

James E. Blades of Sidney was married to Miss Mary Alice Wack of Mansfield on New Year's Day. Dr. Blades was released from the army medical corps as a lieutenant colonel upon his return from three years' service in the Pacific area.

CHRISTIAN COUNTY

Tom J. Meek, who was recently discharged from the armed service with the rank of captain, has moved to Taylorville and is now associated with W. A. Monaghan in the practice of medicine and surgery.

COLES COUNTY

John Alexander who served as a captain in the Medical Corps during the war and recently was discharged, will resume his practice of medicine in the county seat.

Dr. and Mrs. J. G. Baker returned to Mattoon after spending the winter in Florida. Dr. Baker has resumed his practice of medicine.

COOK COUNTY

The Chicago Urological Society held their annual meeting on May 23rd at the Palmer House. James W. Merricks of Chicago, Robert D. Perkins, Moline, and Reed M. Nesbit, University of Michigan, were speakers.

Lt. Col. Vincent Paul Graham, who was chief of x-ray services at Camp Grant, Vaughan General Hospital and Regional Hospital at Fort Ord since 1942, has been appointed assistant professor of roentgenology at the University of Chicago.

Elmer A. Vorisek, addressed a special session of the Minnesota Academy of Ophthalmology and Otolaryngology at the Ninety-third Annual Session of the Minnesota State Medical Association held at St. Paul, Minnesota, on May 20, 1946. He spoke on "Evaluation of the Newer Therapeutic Agents in Ophthalmology."

M. Herbert Barker addressed the General Session of the Texas State Medical Society on May 8th. His subject: "Some Uses and Abuses of the Thiocyanates." On the following day he spoke before the Section on Medicine on "Infectious Hepatitis."

Earl E. Kleinschmidt, director of the Tuberculosis Institute of Chicago and Cook County, has been appointed associate professor of bacteriology and public health on the faculty of the University of Illinois College of Medicine.

Malcolm T. MacEachern, president-elect of the Chicago Medical Society, has been reelected chairman of the Tri-State Medical assembly.

Charles J. Smith and Hugh G. Bridegroom have returned to Evanston to practice medicine after discharge from the medical corps of the armed forces.

Maurice D. Sachnoff who was recently discharged from the army having served for three years as an eye, ear, nose and throat specialist, has taken over the practice of the late J. H. O'Neil.

Francis L. Lederer has received a citation and commendation ribbon from the Navy Secretary James Forrestal for outstanding performance of duty. He served as a captain in the naval reserve.

Herbert S. Sarnoff has resumed the practice of medicine in the Lawrence-Kimball Medical Center, Chicago after over three years' service as a commander in the navy.

Jack H. Raider, former major, returned recently following almost five years' service in the army and has opened an office in Chicago on Irving Park Boulevard.

A plastic artificial eye clinic, the second of 16 the Veterans' administration plans to establish, has been opened at the Hines Veterans Hospital under the direction of Maj. Robert E. Stewart, Washington, D. C.

Irvin C. Winter, a major in the army medical corps until his separation from the service in March, has been appointed director of clinical research for G. D. Searle & Co., Chicago Pharmaceuticals manufacturer.

Lester K. Leserman, released from the army after four years' service, has opened an office for general practice on Chicago's north side.

Albert Wendorf, who served overseas for two and one-half years with the army medical corps, recently opened an office on Lawerence Avenue, Chicago.

Paul Bedinger, who served for four years with the army medical department, has been released from service and has returned to Evanston to continue the practice of internal medicine.

Palmer Good, Oak Park, has returned to civilian practice after 41 months service with the army air corps.

Robert C. Borrowman of Austin has resumed his practice as a physician and surgeon after three and one-half years in the army medical corps.

Herbert W. Korngold, recently discharged from the army medical corps after 20 months' service overseas, has opened an office on Chicago's north side.

Major John M. Staron of Chicago, who has been a patient at the Schick General Hospital for the past seven months, is now on terminal leave and will soon resume practice. He served overseas for 20 months and was awarded the Bronze Star Medal for meritorious service.

M. A. Perlstein visited the Dowling School for Crippled Children in Minneapolis on April 23rd at which time he addressed the Minnessota Association for the Crippled. On May 23rd he participated in the Associate Group Meeting of the National Conference of Social Work speaking on "The Management of Cerebral Palsy."

Roger A. Harvey of Strong Memorial Hospital, Rochester, New York, has been appointed professor and head of the Department of Radiology of the University of Illinois College of Medicine in Chicago.

Ray E. Brown, assistant superintendent of the University of Chicago Clinics, has been appointed to succeed Dr. G. Otis Whitecotton as superintendent.

Two new appointments to the medical staff of the Presbyterian Hospital have been made: Douglas A. MacFadyen, graduate of the Toronto Medical School, for biochemistry, and George M. Hass of Harvard Medical School, in charge of the department of pathology.

Edmund Jacobson of Chicago was invited to address the New York Academy of Science, Psychological Division, on "Electrical Measurements of Mental Activities" at the meeting on May 20th.

The National Gastroenterological Association this year resumes its annual scientific sessions with a three day convention in New York City on June 19, 20, 21. Two Chicago doctors, M. Herbert Barker and Max Thorek will be among those presenting papers.

The Post-Graduate Committee of the Illinois State Medical Society sponsored a conference at Bloomington, Illinois, on June 20th for physicians of central Illinois. Doctors Robert S. Berghoff, Louis R. Limarzi, William J. Pickett, Edward Allen, Leander Riba, James J. Callahan of Chicago, and Harold C. Lueth of Evanston are among those presenting papers.

DEWITT

Drs. H. L. Meltzer, W. R. Marvel, Sidney A. Sinow and Owen W. E. Nowlin have returned from the service and are again in private practice. Drs. L. P. Bunchman, H. D. Seely and Carl Sandburg are out of the service but have located elsewhere. Dr. Keith Rhea is still in

post graduate work and expects to return to private practice in Clinton about the middle of July.

Dr. Charles W. Carter is away on a vacation and a well earned rest; we understand he expects to be gone until some time in July.

Dr. C. S. Bogardus has returned from a vacation in the south and his month's rest has been beneficial to him it seems as he is hard at work again.

The new officers for our society for the year are as follows: Pres., Dr. H. L. Meltzer, Vice Pres., Dr. W. R. Marvel and Sec.-Treas., W. R. Marshall.

We presume that the abundance of rainy weather is the reason that we have not had any complaints among the doctors about sore backs from garden work.

There is a movement on foot and several meetings have been held with reference to establishing health district for DeWitt and Piatt counties.

DU PAGE COUNTY

Arthur S. Webb was recently elected president of the Illinois Tuberculosis Association at the annual meeting of that organization held in Peoria.

HENRY COUNTY

Frederick J. Stewart has resumed his practice in Kewanee after returning from service in the navy. He has rented a suite of rooms in the Baker Building.

JACKSON COUNTY

Two Murphysboro physicians are taking advanced courses in certain phases of their profession: J. P. Winn has gone to St. Louis to study x-ray and gastro-intestinal diseases and H. H. Rodewald has gone to Rochester, Minnesota, for advanced knowledge of obstetrics and gynecology.

Carbondale physicians are planning to set up a cancer treatment unit at Herrin Hospital. L. J. Brown, John S. Lewis, John B. Taylor and Jack Barrow have announced plans to buy the hospital.

JERSEY COUNTY

H. E. Wuestenfeld, Wood River physician, has come to Jerseyville to be associated with Robert G. Mindrup. Dr. Wuestenfeld served in the navy in the Pacific area for three years.

KNOX COUNTY

John A. Bowman who served as a major in the army Medical Corps for four years has opened new offices in Abingdon where he is resuming the practice of medicine.

LAKE COUNTY

Comdr. Walter Wm. Dalitsch of Great Lakes, Illinois, gave a program at the Annual Medical Institute held April 10th at the Illini Community Hospital of Pittsfield, Illinois, on "Acute Infections, Cysts and Fractures of the Jaws." On April 11th, he presented a paper on "Oral Manifestation of Systemic Disturbances."

LA SALLE COUNTY

LaSalle County Medical Society had an interesting annual meeting on April 25th with entertainment by Bob Hall, newsreel photographer who showed a number of films he had taken in Japan.

The medical society held a scientific meeting on May 9th with Doctors Donald Ries and Edward A. Piszczek as speakers.

LEE AND WHITESIDE COUNTIES

The doctors of Lee and Whiteside county medical societies held a joint meeting on April 25th with H. Neeheles of Chicago as speaker.

LIVINGSTON COUNTY

O. L. Bettag was elected president of the Livingston County Medical Society for the ensuing year and Otis Law, secretary. Both doctors are residents of Pontiac.

McLEAN COUNTY

Howard P. Sloan, Bloomington, has resumed his practice after his return from naval service.

New officers for the McLean County Medical Society are E. M. Stevenson, Bloomington, President and Willis Atkinson, also of Bloomington, Secretary-treasurer.

MADISON COUNTY

Edward Ferguson, home on terminal leave in the navy, has decided to locate in Edwardsville and will be associated with his father, E. C. Ferguson who has practiced medicine half a century in Edwardsville.

William W. Billings, after service in the navy medical corps, has resumed the practice of medicine in Alton.

Luke A. Knese who served as Lt. Col. in the army medical corps has announced resumption of general practice in Madison.

OGLE COUNTY

Walter Bebb, a native of Rockford who has practiced at Polo since 1942, has announced that he is again planning to retire. He had resumed service during the wartime emergency.

PEORIA COUNTY

Harold Vonachen, medical director of Caterpillar Tractor Company, was elected a vice-president of the American Association of Industrial Physicians and Surgeons.

Archibald L. Hoyne of Chicago was guest speaker at the meeting of the Peoria County Medical Society on April 30th.

RANDOLPH COUNTY

Ralph May has been reappointed as one of the examining physicians for the Veterans' Administration at Marion.

Omer Hoffman has returned to his practice in Chester after discharge from the navy medical corps.

ROCK ISLAND COUNTY

A Clinical Conference was held on May 1st in Rock Island by the Rock Island County Medical Society with W. W. Bauer, Harold M. Camp and John W. Neal participating in the program.

F. E. Bollaert, East Moline, has been appointed to serve as city physician. He succeeds J. H. Fowler who has served in the position for 22 years.

Herbert S. Huston, of DeKalb, formerly of Carthage, has been appointed first full-time medical director of the Rock Island County Tuberculosis Sanatorium.

ST. CLAIR COUNTY

George R. Hays, Marissa, was honored with a dinner in celebration of his 50 years of service in the practice of medicine.

Henry H. Hurd, one of the first East St. Louis physicians to enter the armed services, has returned to reestablish his private practice with offices in the Spivey Building.

SANGAMON COUNTY

A. E. Steer, Springfield, has resumed practice following three and one-half years in the U. S. Army Medical Corps.

TAZEWELL COUNTY

Albert J. Brown, recently separated from the army medical corps, has opened offices in Pekin to resume the practice of medicine.

MARRIAGES

William R. Cubbins to Miss Mary O'Connor, both of Chicago, May 8th.

James E. Blades, Sidney, to Miss Mary Alice Wack of Mansfield, New Year's Day.

DEATHS

Joseph Anthony Benedetto, Chicago; Chicago College of Medicine and Surgery, 1913; on the staffs of the Mother Cabrini Memorial and Columbus hospitals. Died January 25, aged 54.

William H. Bishop, Elgin, retired; Bennett College of Eclectic Medicine and Surgery, Chicago, 1877. Practiced medicine in St. Charles, Ill., for 45 years prior to retirement. Served as health officer there for many years. Died in Sherman Hospital April 23rd, aged 91.

Alfred H. Claeboe, Waukegan; University of Illinois College of Medicine, 1911. Member of staff of St. Therese and Victory Memorial Hospitals. Died in St. Therese Hospital, May 15, aged 68.

Anders Frick, Chicago; Karolinan Institute, Stockholm, Sweden, 1896. Former chief of staff of the Augustana Hospital. Died May 9th at the age of 78.

Herman J. Friedman, Rock Island; Chicago College of Medicine & Surgery, 1912. Died January 31, aged 71, of rheumatic heart disease.

Robert Marney Gunn, Gila; Medical College of Indiana, Indianapolis, 1889. Had practiced medicine for 50 years. Died at Philo, April 21st, aged 86.

William Logan Johnson, Thompsonville; Missouri Medical College, St. Louis, 1897. Died in his sleep April 15th, aged 77.

Malcolm A. Kemper, Winnetka; Rush Medical College, 1918. Diplomate of the National Guard. Served during World War I. Died January 29th, aged 56.

James A. Nelson, Chicago; University of Illinois College of Physicians and Surgeons, 1894. For more than 30 years, was a medical examiner for several Courts of the Independent Order of Foresters. Died April 19th, aged 78.

James Fulton Percy, Los Angeles; Bellevue Hospital Medical College, New York, 1886. Devised surgical instruments for cancer treatment; was a founder member of the American College of Surgeons and a past president of the Illinois State Medical Society; was a co-founder of the Galesburg (Ill.) Cottage Hospital. Died April 19th at the age of 82.

Hiram Edgar Pinter, Peoria; The Hahnemann Medical College and Hospital, Chicago, 1895. Had lived in Peoria 42 years. Served in medical corps in

World War I. Died April 24th at the age of 76.

William J. Saling, Decatur; University of Louisville School of Medicine, Ky., 1896. Invented a metal splint designed to prevent flat wrist. Died May 10th at the age of 81.

Charles G. Smith, Red Bud; Marion-Sims College of Medicine, St. Louis, Mo., 1892. Had practiced medicine in Red Bud for 48 years. Died in Kensington, Md., April 19th at the age of 77.

Cassius Douglas Wescott, Chicago, retired: Rush Medical College, 1883. At one time was assistant professor of ophthalmology at Rush, and former president of the American Ophthalmological Society. Suffered a broken hip April 22nd following a fall and died May 6th, aged 84.

Charles Ira Wynekoop, Chicago; University of Illinois College of Physicians and Surgeons, 1898. Was president and chief surgeon at Lake View Hospital from 1911-39. Attending surgeon at Augustana Hospital. Died in his home, April 19th, aged 74.

NEW DRUG SN 7618 SUPPRESSES MALARIA BUT DOES NOT CURE IT

A two-year study of a new antimalarial drug, chloroquine, also known as SN 7618, reveals that it is an effective suppressive agent but does not cure malaria, according to a report released by the Board of Coordination of Malarial Studies.

R. F. Loeb, M.D., of New York, Chairman, and his associates, writing in the April 20 issue of *The Journal of the American Medical Association*, say that they found toxic reactions to the drug, which included mild and transient headache, visual disturbances, intense itching and gastrointestinal complaints, following doses adequate for treatment of acute attacks.

In studying approximately 5,000 individuals who received SN 7618, the authors write that they found "in a small number of instances, usually with dosages higher than necessary for either treatment or suppression, individual subjects have refused to continue drug administration because of unpleasant symptoms. None of these manifestations has been constitutionally serious and all have been readily reversible. Unlike quinacrine, SN 7618 does not discolor the skin."

Continuing with their comparsion of the two antimalarial drugs the authors say that like atabrine, SN 7618 does not produce permanent cures. SN 7618 is absorbed somewhat more rapidly than atabrine, and it is highly active against two of the most widely distributed malarial types — vivax and falciparum. However, the authors state, "it does not prevent relapses in vivax malaria even when administered in doses many times those required to terminate an acute attack, nor will it prevent the establishment of vivax infection when administered as a prophylactic. It is highly effective in vivax malaria as a suppressive agent and in the termination of acute attacks, significantly lengthening the interval between treatment and relapse beyond that observed with quinacrine or quinine. In falciparum malaria it has been demonstrated to suppress the acute attack and to effect complete cure of the infection. Studies of the antimalarial activity of SN 7618 against well standardized strains of P. vivax and P. falciparum have shown its activity to be approximately three times that of quinacrine."

In the majority of patients, treatment with this drug will reduce the temperature to normal within 24 hours and in the remainder within 48 hours.

Information! —ABOUT THE NEW



Campbell's STRAINED BABY SOUPS

Q. What are the ingredients in Campbell's Strained Baby Soups?

A. Campbell's use carefully selected meats, cereals and those vegetables scientifically recognized as having the most desirable nutritive qualities. All the food properties are natural. Because Campbell's are accustomed to purchasing only selected meats and vegetables, the best is assured for Campbell's Strained Baby Soups.

Q. What about vitamin and mineral retention?

A. The latest scientific information has been drawn upon in the development of a cooking method to insure the effective conservation of vitamins and retention of minerals.

Q. When should Baby be started on strained soups?

A. Campbell's Strained Baby Soups can be started as early as any strained baby foods. Depending upon the baby, pediatricians recommend beginning between the ages of three and six months.

Q. What about the flavor of Campbell's Strained Baby Soups?

A. Every mother wants her baby's food to be palatable. Campbell's preparation and cooking methods have been devised to retain natural flavors insofar as possible. Babies develop food preferences early, accept some foods, reject others. Their acceptance of Campbell's Strained Baby Soups is indicated by the increasing demand for these soups wherever they have been introduced.

A comprehensive analysis of each soup may be had upon application to Campbell Soup Company, Camden, New Jersey.

5 KINDS:

LIVER
CHICKEN
LAMB
BEEF
VEGETABLE

All in Glass Jars



Campbell's Strained Baby Soups represent fine quality . . . in ingredients . . . in care and method of cooking . . . in retention of minerals and conservation of vitamins . . . and in good flavor. Every resource of Campbell's Kitchens is devoted to that aim.



LOOK FOR THE RED-AND-WHITE LABEL



The Case of the

TRANSPARENT HEART

"FIFTEEN MINUTES * * * that's all . . . sure they'll check . . . the gun . . . the fingerprints . . . the alibi * * * Blind alleys is all they'll find tho * * * Yeah, it's neat and foolproof * * * WHY? . . . Because of FIFTEEN MINUTES . . . for who's goin' to tell within fifteen minutes when he died * * * and fifteen minutes is just enough time . . . for me"

Thus a criminal investigation may bog down because the time of death can not accurately be determined.

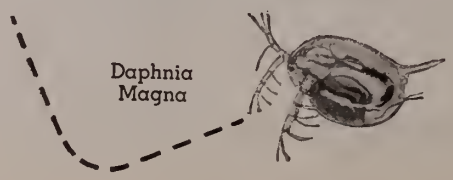
Death Is Measured

In bio-assay procedures the time of death of laboratory animals determines the relative potency of different lots of drug. But here again, the time of death is difficult to observe.

Research in the Irwin, Neisler laboratories has developed an assay procedure for Veratrum Viride wherein death is observed under the microscope. The test is run on Daphnia Magna, a small water crustacean bearing all the characteristics of the mammal and being transparent under the low power lens. Thus the trained observer can actually see the ***transparent heart*** and determine, within narrow limits, the time of death.

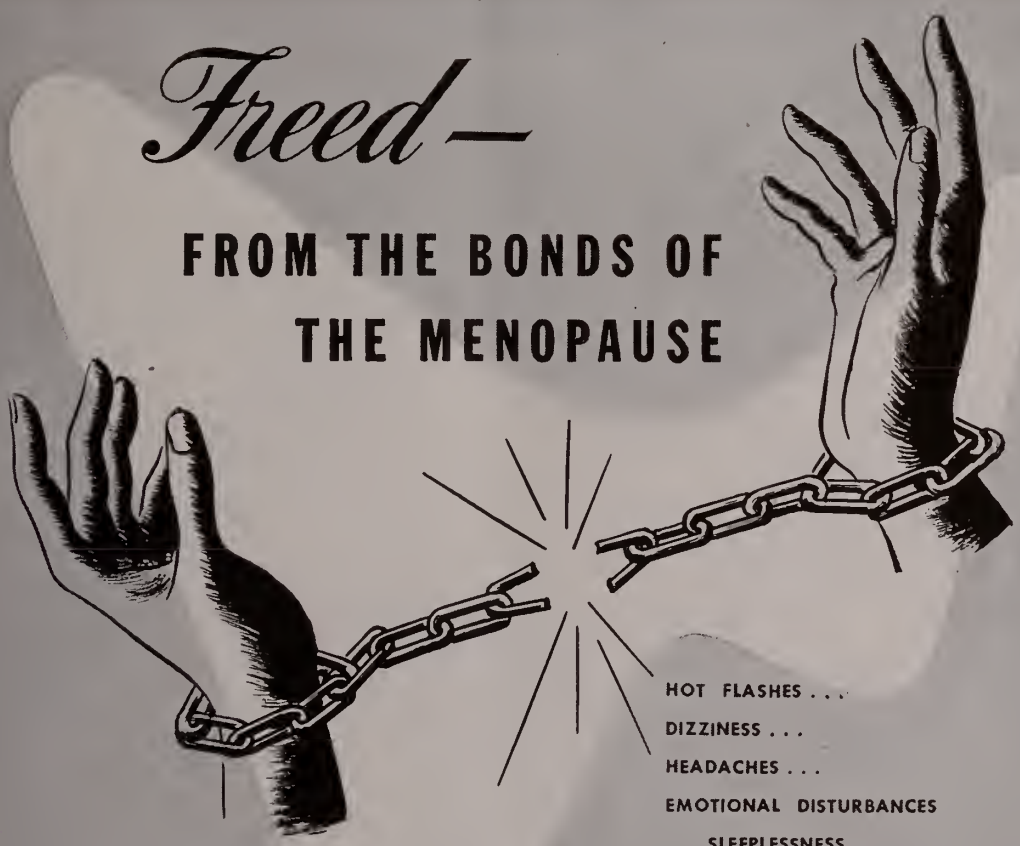
New control methods have been a constant goal of Irwin, Neisler. Only by using a bio-assayed Veratrum Viride, for example, can the physician be assured a known clinical action of this valuable drug in treatment of hypertension.

Irwin, Neisler & Company, Decatur, Illinois, U. S. A.



Freed—

FROM THE BONDS OF THE MENOPAUSE

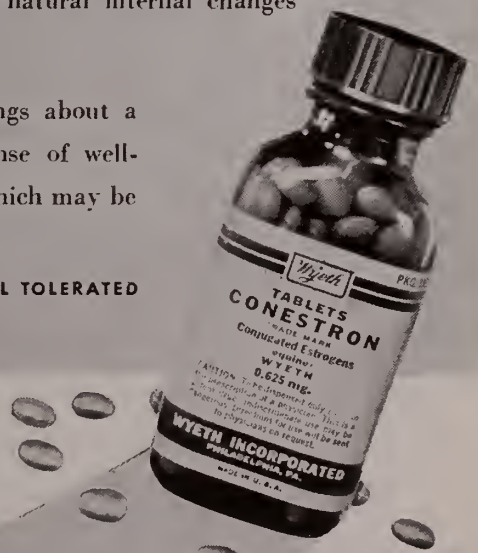


HOT FLASHES . . .
DIZZINESS . . .
HEADACHES . . .
EMOTIONAL DISTURBANCES
. . . SLEEPLESSNESS . . .

SYMPTOM CONTROL with Conestron is often a valuable aid to a smoother, more rapid adjustment to the natural internal changes which occur during the climacteric.

RELATIVELY NONTOXIC, Conestron brings about a striking improvement in the patient's sense of well-being without the distressing side effects which may be associated with synthetic preparations.

HIGHLY POTENT ORALLY ACTIVE WELL TOLERATED



TABLETS

CONESTRON

TRADE-MARK

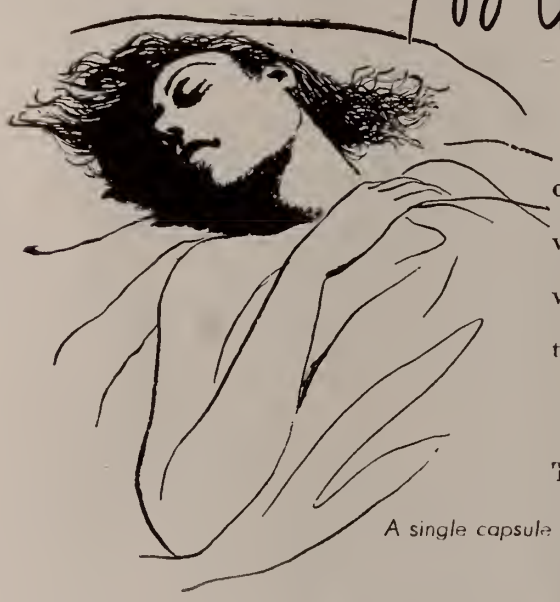
Natural Conjugated Estrogens (equine)

Each tablet contains 0.625 mg. estrogens as sodium estrone sulfate • *Supplied in bottles of 100 and 1000*

Wyeth

REG. U. S. PAT. OFF.

WYETH INCORPORATED • PHILADELPHIA 3, PA.



For the new Concept

of supplying sick patients, who have mixed vitamin deficiencies, with all the essential vitamins in doses of therapeutic magnitude, specify . . .

SQUIBB

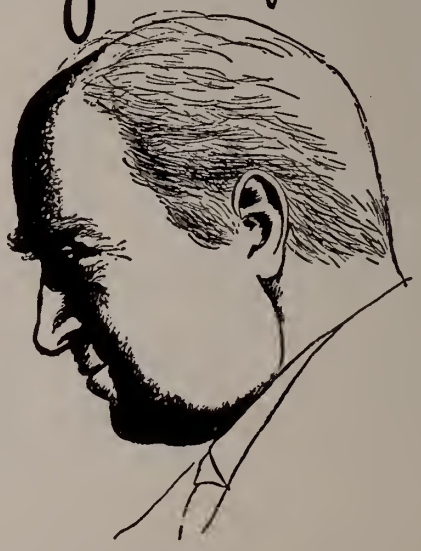
THERAPEUTIC FORMULA

A single capsule contains:

Vitamin A	25,000 units
Vitamin D	1,000 units
Thiamine HCl	5 mg.
Riboflavin	5 mg.
Niacinamide	150 mg.
Ascorbic Acid	150 mg.

For the continuing Concept

of supplying well patients with maintenance dosage levels of all the vitamins as recommended by the Food and Nutrition Board of the National Research Council, specify . . .



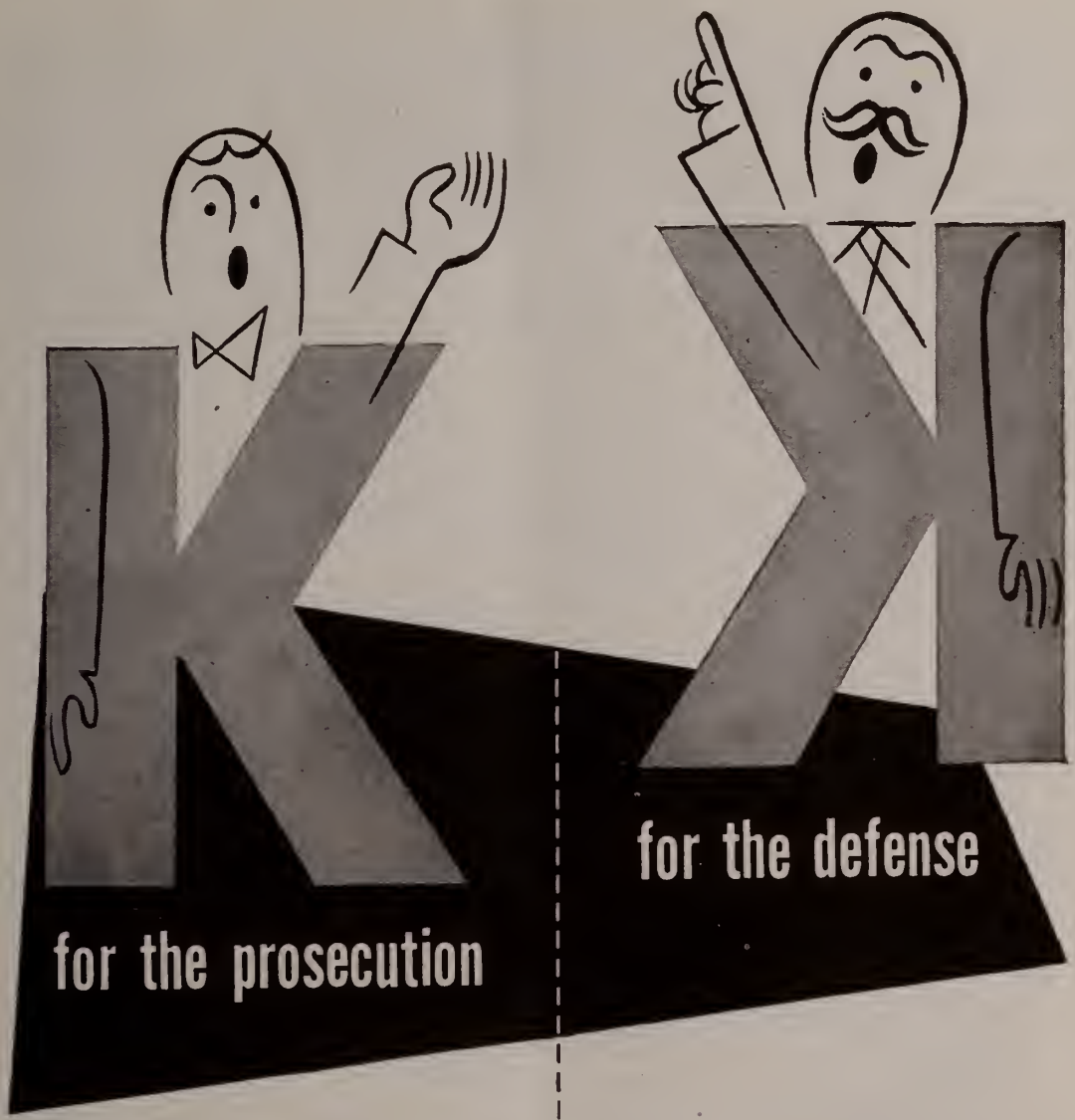
SQUIBB

SPECIAL FORMULA

A single capsule contains:

Vitamin A	5,000 units
Vitamin D	800 units
Thiamine HCl	2 mg.
Riboflavin	3 mg.
Niacinamide	20 mg.
Ascorbic Acid	75 mg.

SQUIBB . . . MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858



Offending agents in diarrhea, both bacteria and toxins, are relentlessly trapped by the powerful adsorptive action of Kaopectate.*

Kaopectate envelops the inflamed mucosa in a soothing, demulcent coating — protecting against further assault. Simultaneously, consolidation of stool and return to more normal bowel function are enhanced by its characteristic hydrophilic properties.

DOSAGE: Kaopectate should be given after each bowel movement. For adults—two to eight tablespoonfuls. For children—one or more teaspoonfuls according to age. *Available in 10 fluidounce bottles.*

Each fluidounce contains: Kaolin . . . . . 90 grains
Pectin . . . . . 2 grains

*Trademark Reg. U. S. Pat. Off.

Upjohn
KALAMAZOO 99, MICHIGAN

FINE PHARMACEUTICALS SINCE 1886

kaopectate

In Daily Maintenance, too...

ALL THESE ADVANTAGES



MAINTENANCE of sustained, unvarying, digitalization of the failing myocardium can be accomplished only through the use of cardiotonic drugs of uniform potency and dependable therapeutic action. Differences in potency make for varying clinical results which, in the case of cardiac disease, may prove extremely distressing to both patient and physician.

With Digitaline Nativelle—pure crystalline digitoxin—such uncertainty is circumvented. Representing the chief cardiotonic glycoside of Digitalis purpurea, Digitaline Nativelle is so constant in potency and pharmacologic action that dosage can be and is measured by weight. One tablet of 0.1 mg. represents the therapeutic equivalent of 1.5 gr. of standardized whole digitalis leaf, a ratio which reflects its high state of purity.[1]

Dependable maintenance digitalization is effected by 0.1 mg. daily; only rarely must this quantity be raised to 0.2 mg. daily. Thus no different instructions need be given the patient. Because it is absorbed in toto, probably from the stomach, Digitaline Nativelle virtually never produces nausea or vomiting from local irritation.[2]

If desired, rapid, *complete*, digitalization may be produced in 6 to 10 hours by the *oral* administration of 1.2 mg. of Digitaline Nativelle,[3] given either at one time or in 2 doses of 0.6 mg. each at a 3- to 6-hour interval.

WHEN THE INTRAVENOUS ROUTE IS DESIRED

Digitaline Nativelle is available in ampuls of 0.2 mg. (1 cc.) and 0.4 mg. (2 cc.), in packages of 6 ampuls. Intravenous dosage identical with oral dosage for initial digitalization.



[1] Gold, H.; Cattell, M.; Modell, W.; Kwit, N. T.; Kramer, M. L., and Zahm, W.: J. Pharmacol. & Exper. Therap. 82:187 (Oct.) 1944.
[2] Gold, H.: Connecticut M.J. 9:193 (Mar.) 1945.
[3] Levine, S. A.: Clinical Heart Disease, ed. 3, Philadelphia, Pa., W. B. Saunders Company, 1945, p. 273.

Physicians are invited to send for samples, literature, and bibliography.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Pharmacy and Chemistry

COUNCIL ACCEPTED

VARICK PHARMACAL COMPANY, INC.
A Division of E. Fougera & Co., Inc.
75 Varick Street, New York 13, New York

Digitaline Nativelle

REG. U. S. PAT. OFF

THE ORIGINAL DIGITOXIN IN PURE, CRYSTALLINE FORM



ASPIROCAL

In the many gynecological and obstetrical conditions which require symptomatic relief of pain and reduction of nervousness and excitability, Aspirocal is the logical combination of analgesic-sedative-antispasmodic medication.

Each Tablet Aspirocal Comp. contains:

Acetylsalicylic Acid	**4 gr.**
Calcium Gluconate	**2 gr.**
Butisol (*5-ethyl-5-secondary butyl barbituric acid 'McNeil'*)	**1/3 gr.**

Butisol has a quick, long-continued sedative action with little tendency toward the familiar barbituric "hangover." In combination with acetylsalicylic acid and calcium gluconate, more effective analgesia is provided.

Aspirocal is indicated in dysmenorrhea, headache, neuralgia, etc., —wherever sedation and analgesia are required. Supplied in bottles of 100, 500 and 1000 tablets. Caution: Use only as directed.

McNeil Laboratories
INCORPORATED
PHILADELPHIA • PENNSYLVANIA

HYDROSULPHOSOL

Provides all 9 desired requisites as a superior therapy in thermal, acid and caustic burns.

Provides for mechanical exclusion of air at site of burn • Insures prompt relief of pain • Aids in abating burn shock • Bacteriostatic influence • Non-toxic effect • STIMULATES TISSUE REPAIR • Rapidly reduces inflammation and edema • Results in absence or marked reduction of scar tissue • Tends to shorten convalescent period.





HYDROSULPHOSOL is a true solution of sulfur bearing compounds resulting solely from the reduction of flowers of sulfur by a catalytic process. In aqueous solution, it is capable of rapidly releasing its high concentration of sulfhydryl ion (-SH radical) in such form as can be effectively utilized by the body in the synthesis of sulfur-containing amino acids . . . functionally active in cell stimulation and directly related to tissue respiration and repair.

Unlike the sulfa group and many other sulfur compounds, Hydrosulphosol is non-toxic when administered orally or topically applied in heavy concentrations, and will not result in damage to liver and kidney function.

Reprints of scientific papers by authoritative investigators available on request.

AVAILABLE FORMS

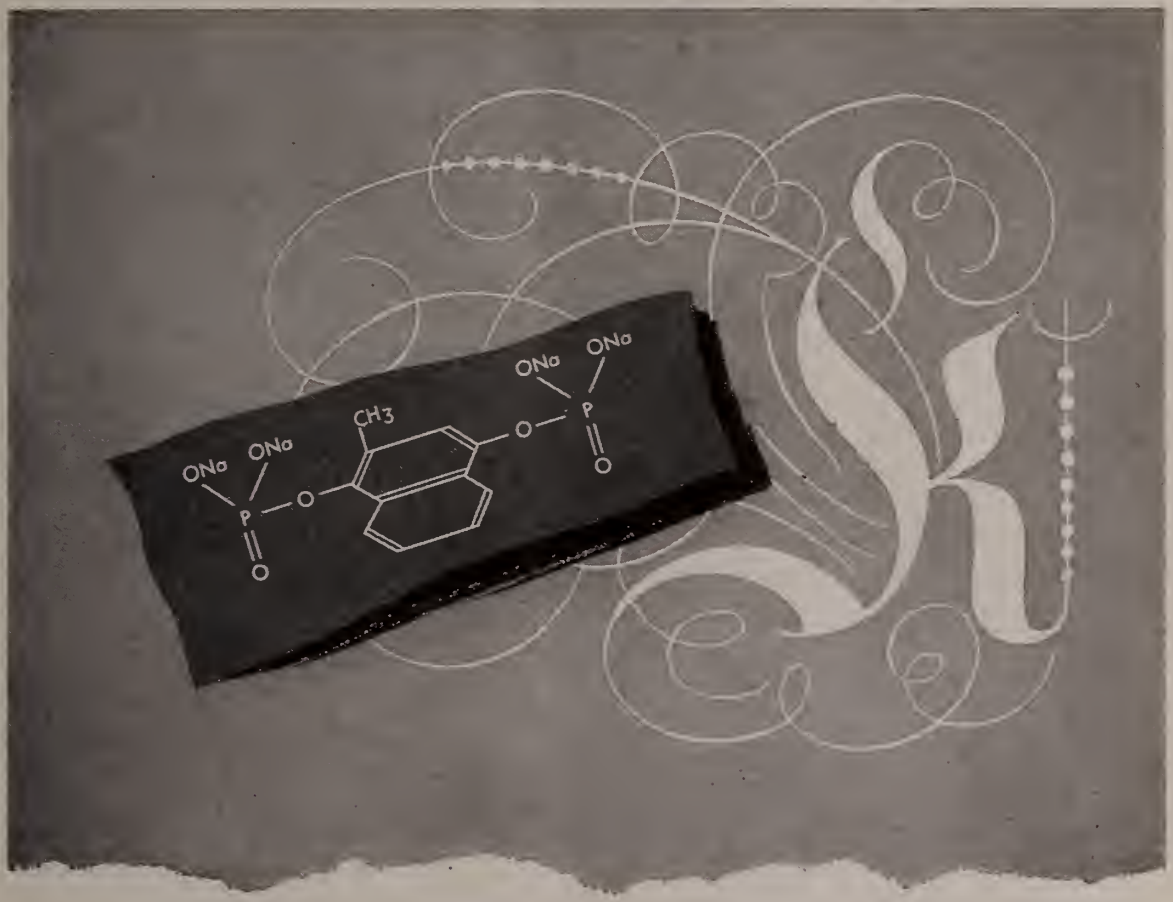
AQUEOUS SOLUTION:
Bottles of 8, 4 ond 1 fluid ounce.

OINTMENT:
Jars of 1 lb. and 1 oz.

•

ORDER TODAY through your surgical or hospital supplier.

Distributed by
REES-DAVIS DRUGS, INC.
MERIDEN CONNECTICUT



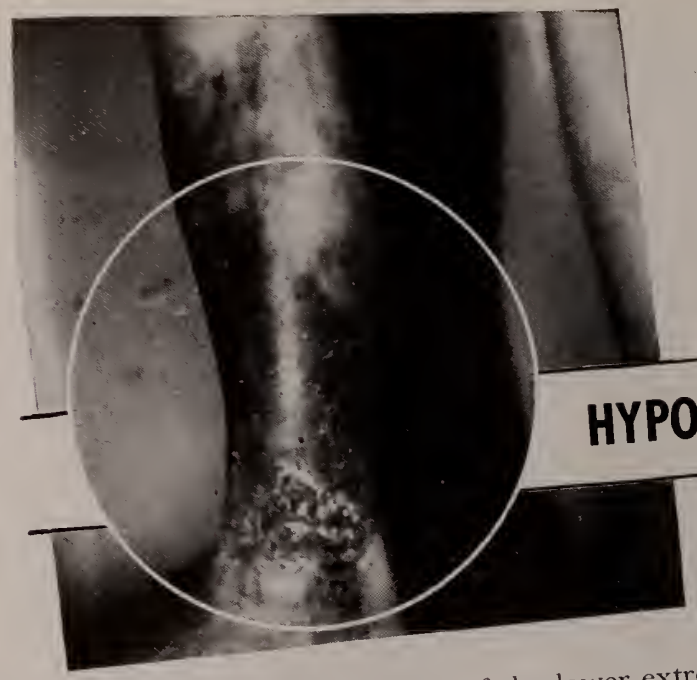
WHEN VITAMIN K IS NEEDED...

Synkayvite* 'Roche' is the choice of many physicians because of its distinctive clinical advantages. Synkayvite is water-soluble, stable and—molecule for molecule—has "an antihemorrhagic activity even greater than that of fat soluble menadione" (J. G. Allen, *Am. J. M. Sc.*, 205:97, 1943). It may be taken orally without the use of nauseous bile salts or administered parenterally. Synkayvite is available in oral tablets, 5 mg each, and 1-cc ampuls, 5 mg and 10 mg each.

HOFFMANN-LA ROCHE, INC., Nutley 10, New Jersey

*2-methyl-1, 4-naphthohydroquinone diphosphoric acid ester tetrasodium salt

SYNKAYVITE 'ROCHE'



IN THOSE CHRONIC *Difficult* HYPOSTATIC DISORDERS

THE chronic dermatitis of the lower extremities resulting from venous embarrassment, often presents trying therapeutic problems. While correction of the usually coexisting varicose veins is desirable, this objective may be difficult of achievement for a variety of reasons. In such instances, Tarbonis proves of unusual value. Its decongestant action reduces intercellular edema, improves capillary circulation, and relieves the distressing pruritus. Non-staining, odorless, and colorless, Tarbonis is readily applied to the involved area without offensive soiling of skin or clothing. Thus continuous therapy, day and night, becomes possible, greatly enhancing the therapeutic benefits attained.

TARBONIS
*REG. U. S. PAT. OFF.

THE TARBONIS COMPANY
4300 Euclid Avenue, Cleveland 3, Ohio

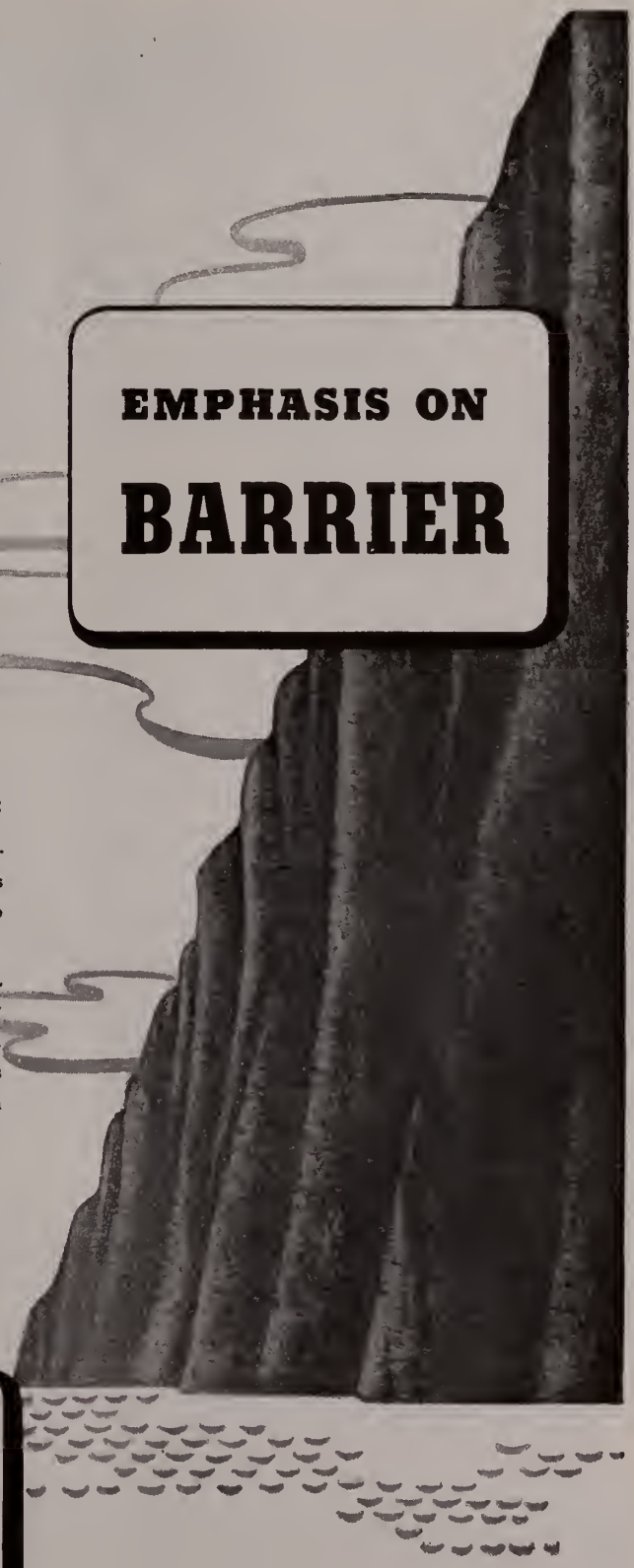
Tarbonis is colorless, odorless, greaseless, does not stain linen or skin. It contains 5% Liquor Carbonis Detergens extracted from selected tar by a unique process, retaining all beneficial factors of tar and eliminating the irritants. Menthol and lanolin are also incorporated in the vanishing cream base, making for a preparation of unusual pharmaceutical elegance. Indicated in eczema, psoriasis, ringworm, occupational dermatoses, folliculitis, seborrheic dermatitis, intertrigo, pityriasis, varicose ulcers, contact dermatitis, lichen planus, dermatitis and ulcus hypostaticum.

AUTHORITATIVE clinical investigators place strong emphasis on the importance of the barrier in conception control.

In a recent comprehensive report,[1] physicians indicated an overwhelming preference for the diaphragm and jelly method (93% of 36,955 new cases).

In keeping with these expressed opinions we continue to suggest that for the optimum in protection the physician prescribe the combined use of occlusive diaphragm and spermatocidal jelly.

You assure your patient a product of highest quality when you specify *Ramses*



Competent observers report:

"Jellies and creams used without mechanical devices yield relatively high protection, but studies have not proven them fully dependable to block the external os, or to invalidate all sperm."[2]

"When no type of occlusive pessary can be fitted, or when the woman refuses to use one, the only other reliable method is the use of the condom. With proper technic and instruction this method is highly reliable but has many disadvantages which the diaphragm method overcomes."[3]

1. Clinic Reports: Planned Parenthood Services in the United States. Human Fertility 10: 25 (Mar.) 1945.
2. Dickinson, R.L.: Techniques of Conception Control. Baltimore, Williams and Wilkins Co., 1942.
3. Warner, M.P.: J.A.M.A. 115: 279 (July 27) 1940.

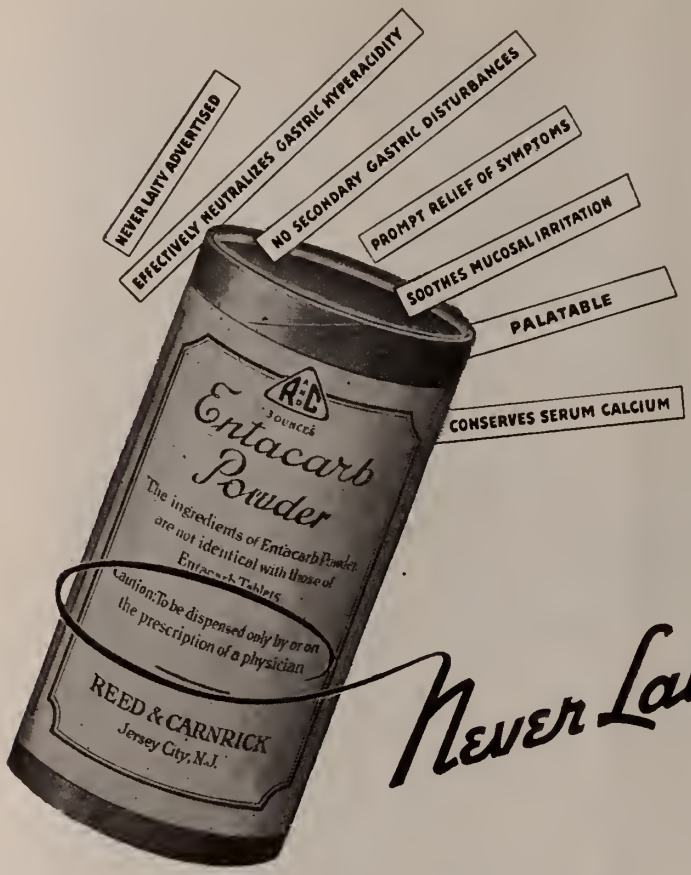


gynecological division

JULIUS SCHMID, INC.

423 West 55 Street • New York 19, N. Y.

QUALITY FIRST SINCE 1883



Slip labelled containers emphasize the strictly ethical nature of ENTACARB POWDER — quick acting, palatable antacid.

Entacarb Powder promptly relieves gastric distress due to hyperacidity, and promotes expulsion of flatus without unpleasant aftereffects. The chief alkalizing agent, Calcium Carbonate, is present in the form of an unusually light, finely divided powder, which dissolves readily in the acid of the stomach. Its use tends to conserve blood serum calcium.

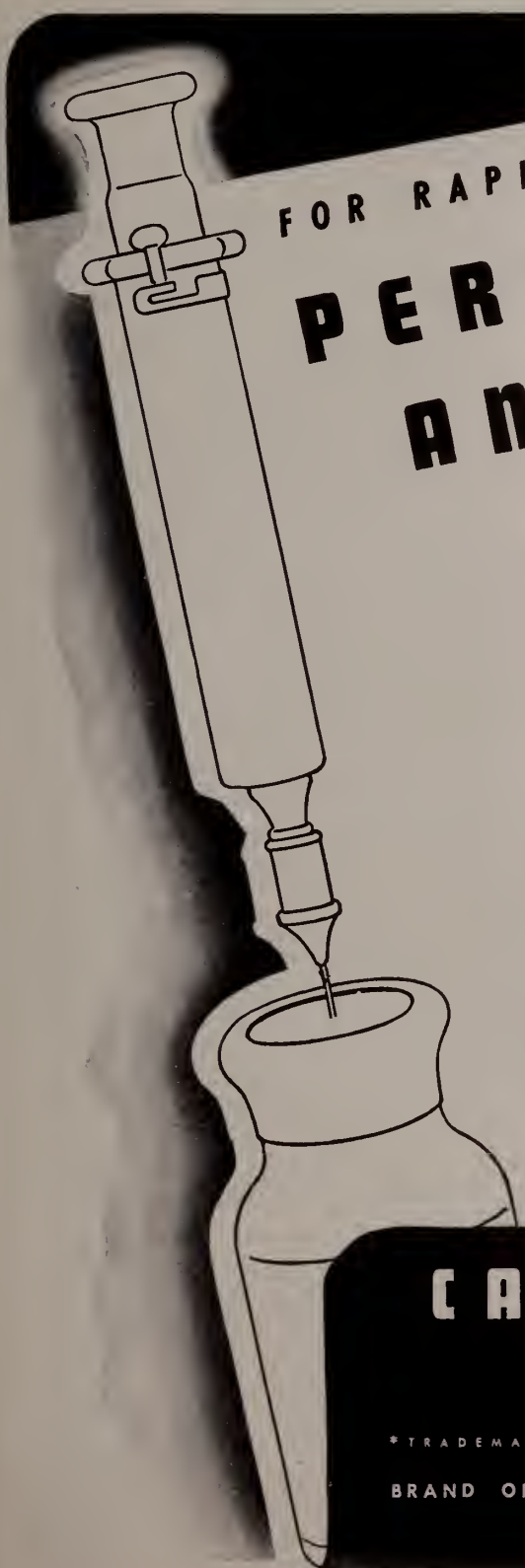
FORMULA: Each 2.6 Gm. (approx. one heaping teaspoonful) contains — Calcium Carbonate 1.04 Gm., Magnesium Carbonate 0.39 Gm., Sodium Bicarbonate 0.19 Gm., Potassium Bicarbonate 0.06 Gm., Kaolin 0.78 Gm., Bismuth Subcarbonate 0.13 Gm. Agreeably flavored.

Administration and Dosage: One heaping teaspoonful, stirred in half glass of water, to be taken after meals, or at intervals of 2 to 4 hours as indicated.

Available: 3 oz. and 5 lb. containers.

ENTACARB POWDER

REED & CARNRICK - Jersey City 6, N. J. - Toronto, Ont., Can.



FOR RAPID RESPONSE IN

PERNICIOUS ANEMIA

The large doses of liver extract needed for rapid response in pernicious anemia can be injected in small volume with Campolon Forte, containing 15 U. S. P. units in 1 cc. The daily administration of 1 cc. by intramuscular injection often produces a dramatic response within three or four days. The average maintenance dose is 1 cc. every seven to fourteen days.

Ampuls of 1 cc., boxes of 3; vials of 5 cc. and 10 cc.
(15 U. S. P. units in 1 cc.)

CAMPOLON* FORTE

*TRADEMARK REG. U. S. PAT. OFF. & CANADA

BRAND OF LIVER INJECTION (CONCENTRATED)

Winthrop CHEMICAL COMPANY, INC.

Pharmaceuticals of merit for the physician

NEW YORK 13, N. Y. WINDSOR, ONT.

P. R. N.

The Jocular Jingles of C. G. F.

by

Charles G. Farnum M. D.
Peoria, Ill.

In a recent letter to Dr. Harold Camp, Editor, I remarked, apropos of the number of older doctors who are incapacitated, "The old gray mare she ain't what she used to be."

In his reply he suggested that the thought be put into rhyme. Here it is.

The Older Doctors

In by-gone time, when in their prime,
They worked with strenuosity;
In years of late the hand of Fate
Has slowed their great velocity.

They now are in the field of geriatrics,
The old B.P. is higher than should be,
While many have anaemia
Still others have uraemia,
Bifocals give their only chance to see.

Their adipose panniculus has vanished,
They're bald and deaf, their muscles flabby, weak,
Arthritis hampers walking,
Lost teeth retards their talking,
Their arteries are prone to break or leak.
A prostate large makes many interruptions,
Their myocardium makes their travel slow,
They do not think as clearly,
Each effort costs more dearly,
Asthmatic wheezing makes them puff and blow.

The sword of Damocles hangs just above them,
They wonder what is coming next and when,
A coronary closure,
Pneumonia from exposure,
Or other ills harassing older men.

With multiplying handicaps they labor,
Their strength is slowly waning they can see,
The pathways get much rougher,
The job gets vastly tougher,
The old gray mare ain't what she used to be.

HUMILIATION

So many men can beat me
I laugh when they defeat me,
I try to be a sport and all it means;
But now sack cloth and ashes
Replace my woods and mashies —
I'm beaten by a lassie in her teens.

I smashed mine long and wildly,
She tapped hers gently, mildly,
But always on the fairways or the greens;
She shot an eighty neatly,
She beat me most completely,
This nifty little lassie in her teens.

Youth will be served they tell me,
And that is what befell me;
The episode humiliates, demeans
An ancient, hard boiled golfer,
At women's golf a scoffer,
When beaten by a lassie in her teens.

LOONY LIMERICK

Jones had a most tiny physique,
His voice had an odd little sqique,
Folk thought he was loony
Because he was poony
In truth he was humble and mique.

"Oh dear!" Said the girl, with a sigh,
When she was just learning to fligh,
"If I had been planned
With one extra hanned,
I'd master this plane bigh and bigh."

The Theraputist

He was a theraputist of the very greatest fame,
To cure disease was just a simple trick,
No matter what afflicted you he cured it just the same,
His method was effective and was quick.

He cured tuberculosis and cirrhosis and kyphosis.
And smelly halitosis was quite easy to destroy;
Glaucoma, carcinoma, mycetoma or neuroma,
A cranial glioma stayed no longer to annoy.

Encephalitis, meningitis, every known arthritis,
Acute appendicitis were as nothing to be feared;
Rubella, varicella or a tumor in the cella,
A broken up patella; they all promptly disappeared.

A schizophrenic, neurasthenic, all things pathogenic
By methods hygenic were all given prompt relief;
Anaemia, leukaemia, septico-pyaemia,
And fatal tularaemia, were cured beyond belief.

Diplopia, xanthopia, even presbyopia,
You lived within Utopia, he made your life secure;
And yet he hurried and he scurried and became quite flurried
And very often worried when he'd nothing left to cure.

And so for sheer diversion he tried golf for peace of mind,
He thought for exercise it would suffice;
He then went nuts for though he cured disease of every kind
He never could learn how to cure a slice.

CLAIMS

VS.

DIFFERENCES

WHAT value have claims of superiority unless there is a difference in formula or process to justify such claims?

Take cigarettes for example.

PHILIP MORRIS Cigarettes are *made* differently. In the clinic as well as in the laboratory, the *advantages* of PHILIP MORRIS have been repeatedly observed, repeatedly reported by *recognized authorities* in leading medical journals. Yes, PHILIP MORRIS *claims* superiority . . . *and that superiority has been proved.**

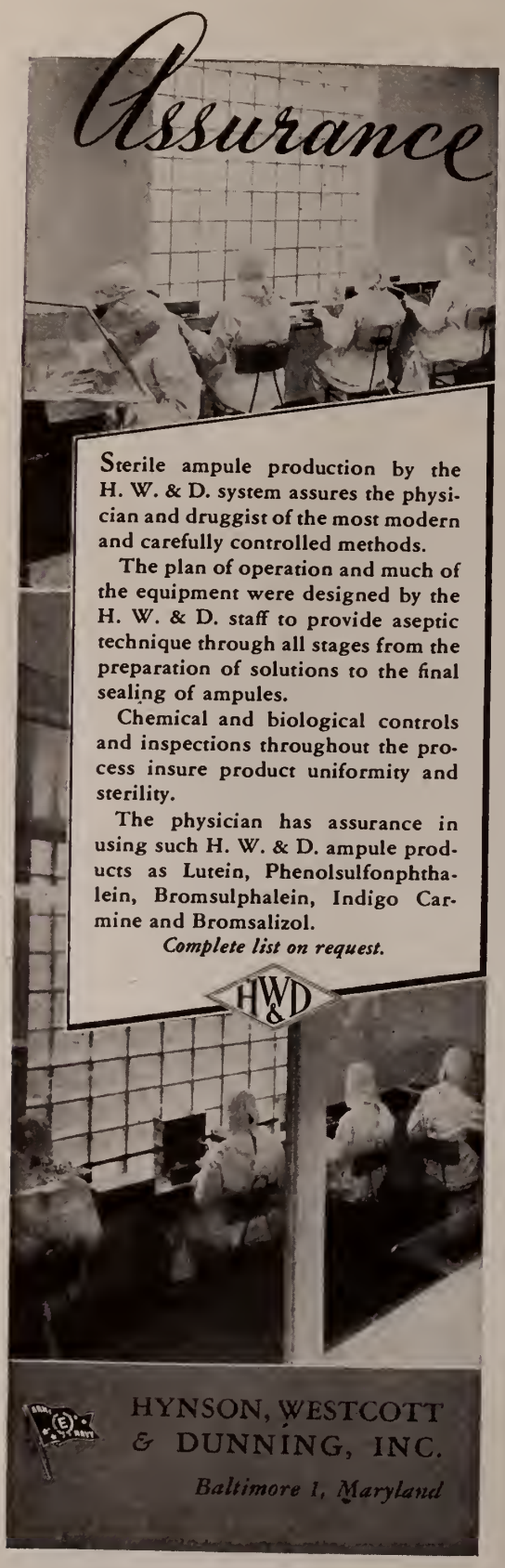
May we suggest that your patients suffering from irritation of the nose and throat due to smoking change to PHILIP MORRIS—*the one cigarette proved definitely less irritating.*

PHILIP MORRIS

PHILIP MORRIS & CO., LTD., INC.,
119 FIFTH AVENUE, N. Y.

**Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154*
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60
Proc. Soc. Exp. Biol. and Med., 1934, 32, 241
N. Y. State Journ. Med., Vol. 35, 6-1-35, No. 11, 590-592.

TO THE DOCTOR WHO SMOKES A PIPE: We suggest an unusually fine new blend—COUNTRY DOCTOR PIPE MIXTURE. Made by the same process as used in the manufacture of Philip Morris Cigarettes.



STREPTOMYCIN'S USE LIMITED TO RESEARCHERS, DOCTOR SAYS

Scarcity Makes It Necessary To Restrict Use To Infections Which Don't Respond To Other Drugs

In an official statement appearing in the May 4 issue of *The Journal of the American Medical Association,* Chester S. Keefer, M.D., of Boston, explains how the restricted supply of streptomycin is being used.

Dr. Keefer, Chairman of the Committee on Chemotherapeutics and Other Agents of the National Research Council, says:

Many recent publications describing the effects of streptomycin have created so much interest and so many demands for it that the medical profession and public should be informed of the arrangements now in effect to adjust the present very limited supply to a program of clinical investigation.

The Committee on Chemotherapeutics and Other Agents of the National Research Council, at the request of the Civilian Production Administration and the Streptomycin Producers Advisory Committee, is supervising an investigation of the clinical usefulness and possible toxicity of streptomycin. The primary interest of the committee in streptomycin is to determine its effectiveness and toxicity in certain infections which are not susceptible to treatment with sulfonamides, penicillin and other therapeutic agents.

The introduction of streptomycin to the medical profession is so recent that much remains to be learned concerning limitations of its usefulness, methods of administration, dosage, toxicity, and so on. Most of the information obtained so far has issued from military and civilian hospitals as a result of clinical investigations which have been carried out under arrangements between producers of streptomycin and individual clinical investigators. Similar studies are being continued and amplified by the Committee on Chemotherapeutics and Other Agents of the National Research Council, and a fraction of the streptomycin is now being allocated to the committee for these purposes. It is placed in charge of the chairman for distribution to those hospital physicians most competent to obtain the vitally needed information.

In addition to the group of accredited investigators, individual physicians have been included in the research program when they have patients with diseases which are being studied by the committee. Full information concerning the bacteriologic diagnosis of the case is required, and when streptomycin is allotted it is with the understanding that a full report of the case is to be returned to the committee for analysis and that all unused material is to be returned for use in other suitable cases.

Because of the restricted supply of streptomycin, it is obvious that patients selected to receive it must be those whom it can be expected to benefit and from

(*Continued on page* 58)



Greater Response in IRON-DEFICIENCY ANEMIAS

White's MOL-IRON TABLETS

White's Mol-Iron is a specially processed co-precipitated complex of molybdenum oxide 3 mg. (1/20 gr.) and ferrous sulfate 195 mg. (3 gr.). Available clinical evidence indicates that it is not only tolerated much more satisfactorily than ferrous sulfate, but also that its use provides the striking advantages charted below:

GREATER RAPIDITY OF CLINICAL RESPONSE



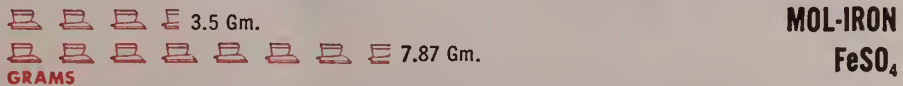
Completely effective therapeutic response (return to normal blood values) was obtained in an average of 13.7 days of Mol-Iron therapy—whereas ferrous sulfate therapy *failed* to produce normal hemoglobin values even after an average of 20.3 days.

GREATER AVERAGE DAILY HEMOGLOBIN INCREASE



Note that the group treated with Mol-Iran averaged a daily hemaglobin increase markedly greater than the increase achieved with ferraus sulfate.

MUCH LOWER AVERAGE INTAKE OF IRON



The group treated with ferraus sulfate ingested 100% more bivalent iron than the Mal-Iron treated group—yet in the Mal-Iran graup a return to narmal blood values was achieved whereas optimal response in the ferrous sulfate treated group was not accomplished in the period of study.

Charts summarize results of controlled study of comparative therapeutic response in post-hemorrhagic and nutritional hypochromic anemias. Series includes 49 cases treated with Mol-Iron, 21 with exsiccated ferrous sulfate; results are typical of those observed in treatment of iron-deficiency anemias with White's Mol-Iron.

DOSAGE: 1 or 2 tablets 3 times daily after meals.

Bottles of 100 and 1000 tablets.

Ethically promoted—not advertised to the laity.

WHITE LABORATORIES, INC.
Pharmaceutical Manufacturers
NEWARK 7, N. J.

STREPTOMYCIN (Continued)

whose treatment useful, needed information can be derived. Under present conditions many requests will inevitably have to be refused.

Following is a list of the diseases which are under investigation, together with a list of those which are not being investigated:

DISEASES WHICH ARE TO BE INVESTIGATED WITH STREPTOMYCIN UNDER THE COMMITTEE

Gram negative bacillary infections of the genito-urinary tract resistant to the sulfonamides; gram negative bacillary infections with bacteremia; Hemophilus influenzae infections, including meningitis, pneumonia, middle ear disease and laryngotracheitis; Friedländer's bacillus pneumonia; typhoid; Salmonella infections (paratyphoid); acute brucellosis with bacteremia; tularemia; bacterial endocarditis due to gram negative bacilli.

DISEASES WHICH ARE NOT BEING INVESTIGATED BY THE COMMITTEE AT PRESENT

Chronic idiopathic ulcerative colitis; lupus erythematosis acutus disseminatus; leukemia; cancer; fever of unknown cause; rheumatic fever; rheumatoid arthritis.

TUBERCULOSIS

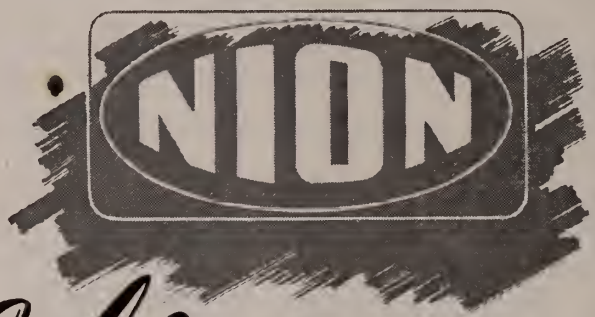
For the present only those cases of tuberculosis which were already under treatment prior to March 1, 1946 are being studied. A broader program for the study of tuberculosis is planned, but it cannot be undertaken at the present time because of inadequate supplies of streptomycin. It is the hope of the Committee on Chemotherapeutics and Other Agents to explore this problem further. The medical profession will be kept informed of developments.

PROCUREMENT AND ALLOCATION OF STREPTOMYCIN

All streptomycin now being produced must be reported to the Civilian Production Administration for allocation by it. Allocations are made to the Army, Navy, U. S. Public Health Service, Veterans Administration and the National Research Council after discussion of the needs of each and adjustment of the available supply to those needs.

No one other than the agencies named may purchase streptomycin. No patient who receives it may pay for it. No physician is charged for it.

The present program of clinical research is being conducted by the concerted efforts of the government, streptomycin producers, the National Research Council and civilian medical scientists of the highest standing with the sole purpose of obtaining the necessary information concerning streptomycin in the shortest possible time. The program of the National Research Council is being supported by grants in aid from eleven pharmaceutical and chemical companies.



Calcicaps WITH Iron

A New Calcium, Phosphorous, Iron and Vitamin D Product

For use in pregnancy and lactation, or whenever Calcium and Iron therapy is indicated.

EACH CALCICAP CONTAINS:

Ferrous gluconate, 1 grain — Dicalcium Phosphate, 4½ grains
Calcium gluconate, 3 grains — Vitamin D, 375 U.S.P. units

Samples and literature on request.

NION CORPORATION • LOS ANGELES 38, CALIFORNIA



gentle reminder

For the patient with functional constipation, 'AGAROL'* Emulsion serves as a gentle reminder rather than a violent summons. This emulsion of mineral oil with phenolphthalein and an agar-gel permits effective, yet gentle relief through:

1. Replacement of lubricating factors with highly emulsified mineral oil and a colloidal gel similar to mucin in its lubricating properties.
2. Replacement of moisture through its distinctive hydrophilic action.
3. Minimal threshold stimulation of peristaltic activity.

These actions are integrated to promote the formation of a consolidated, lubricated and easily passed fecal mass. Simultaneously, they encourage physiologic restoration of the patient's own evacuatory mechanisms.

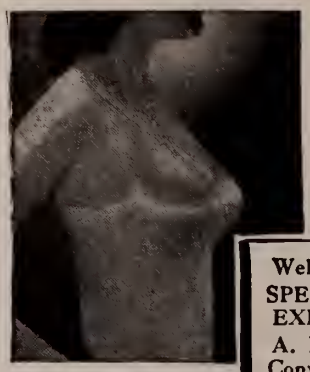
For additional pharmaceutical details consult your pharmacist—for more extensive medical data write Medical Division of William R. Warner & Co.

William R WARNER and Co. Inc. 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'agarol'

Emulsion of mineral oil with phenolphthalein and an agar-gel. Dispensed in bottles of 6, 10 and 16 fluidounces.

* Trademark Reg. U. S. Pat. Off.



Welcome!
SPENCER
EXHIBIT
A. M. A.
Convention
BOOTH E-4

You Will Find Spencer Breast Supports

Effective For

ANTEPARTUM-POSTPARTUM PATIENTS
AND AS AID TO TREATMENT OF
NODULES - PROLAPSE - ATROPHY
STASIS - HYPERTROPHY
AND FOLLOWING BREAST SURGERY

Individually Designed For Each Patient

Since each Spencer Breast Support is *individually designed* it fits with precision and comfort; holds breasts in position to encourage improved circulation without placing undue strain on shoulders.

For a dealer in Spencer Supports look in telephone book for "Spencer corsetiere" or "Spencer Support Shop," or write direct to us.

SPENCER, INCORPORATED
129 Derby Ave., New Haven 7, Conn.
In Canada: Rock Island, Quebec.
In England: Spencer (Banbury) Ltd., Banbury, Oxon.

May We Send You Booklet?

Please send me booklet, "How Spencer Supports Aid the Doctor's Treatment."

Name ..... M.D.

Street .....

City & State G-6-46

SPENCER *INDIVIDUALLY DESIGNED* SUPPORTS
Reg. U.S. Pat. Off.
For Abdomen, Back and Breasts

LONDON AIR RAIDS DID NOT INCREASE MENTAL DISORDERS DURING WAR

The devastating air raids over London during the war years did not increase mental disorders, according to the London correspondent of *The Journal of the American Medical Association.*

This conclusion, appearing in the March 30 issue of *The Journal,* was based on reports from 216 clinics dealing with mental patients in England. The correspondent said in part:

"The important conclusion is reached that there are no grounds for supposing that the war has caused an increase in the more serious forms of mental disorder requiring admission to a hospital. This is remarkable in view of the heavy bombing, with considerable loss of life and injuries to persons and destruction of buildings in our cities while the country was passing through the greatest danger to which it ever was exposed.

"The threat remains that the coming years may show an increase in neurotic disorders as a result of the difficulties of adjustment associated with demobilization and the return of prisoners who have endured German barbarities."

Dr. C. P. Blacker, who undertook the survey with the cooperation of the Ministry of Health, believes it possible that latent neurosis "may reveal itself in the civilian population when the stresses of war are relaxed."

Many general hospitals refuse admission to patients afflicted with pulmonary tuberculosis and many insist upon the removal of patients whenever diagnostic study discloses the presence of this disease. Advances made in the treatment of tuberculosis, particularly "collapse therapy" and other surgical procedures, make it readily possible for the general hospital to admit many such patients, particularly in certain phases of the illness, but special institutions and tuberculosis sanatoria will still be needed. General hospitals could materially assist in the campaign for the further reduction and possibly the eradication of pulmonary tuberculosis by providing routine radiological examinations of the chests of all patients upon admission. New techniques have materially reduced the costs of such examinations. As a routine procedure, chest filming has been shown to be of greater value in disclosing abnormal conditions than is true of many other routine diagnostic procedures now generally practiced, such as urinalysis, blood counts and serological examinations. Hospital Survey News Letter, Commission on Hosp. Care, Nov., 1945.

Restore Electrolyte Balance



Disturbance of electrolyte balance in Addison's disease and in burn shock can be corrected promptly and dramatically with CORTATE, Schering's desoxycorticosterone acetate *administered intramuscularly.*

In infections as pneumonia, influenza, etc., followed by prolonged asthenia due to adrenal hypofunction, CORTATE *administered sublingually* will be found a convenient and economical method for speeding rehabilitation.

cortate

CORTATE, desoxycorticosterone acetate in oil, 5 mg. per cc. for intramuscular injection. Ampules of 1 cc., boxes of 6 and 50 ampules; vials of 10 cc. containing 50 mg. CORTATE for sublingual administration is supplied in a solution of propylene glycol containing 20 per cent absolute alcohol U.S.P. in a concentration of 10 mg. per cc. Available in 10 cc. screw capped vials with calibrated dropper.

Trade-Mark CORTATE—Reg. U. S. Pat. Off.

SCHERING

Schering CORPORATION · BLOOMFIELD · N. J.

In Canada, Schering Corporation Limited, Montreal

DRUG AIDS PATIENTS SUFFERING FROM BLOOD CLOTTING IN VEINS

Swedish Doctor's Five Year Study Shows Patients Can Be Spared Pain, Ulcers And Even Death By Treatment

A Swedish physician's five year study reveals that patients suffering from acute venous thrombosis — blood clotting in the veins — can be spared pain, ulcers, and even death, by treatment with heparin, one of the drugs which prevents blood clotting.

Gunnar Bauer, M.D., surgeon in chief of the General Hospital in Mariestad, Sweden, presents his report in the May 18 issue of *The Journal of the American Medical Association.*

Between Oct. 1, 1940 and Sept. 30, 1945, 209 cases of acute thrombosis of the deep veins of the leg were treated at the Mariestad Hospital. As a result of heparin treatment pain, fever and swelling were eliminated; the average period in bed was shortened from 40 days to about 4.7 days; the death rate was reduced to less than one tenth of what it was before.

The author reviewed a series of 264 patients with thrombosis treated by accepted methods over a 10 year period and found that 47 died. In the heparin treated group, covering a five year period, only three died.

Dr. Bauer made an intensive study to prove his theory that the starting point of the clotting process was in the lower part of the leg. X-ray diagnosis, used on 190 patients, showed in over 98 per cent various phases of evolution of the clot in this region.

The author suggests that this knowledge should be an important aid in diagnosing the disease in its early stage. Whenever there is a rise in temperature without any obvious reason, or a pain or stitch in one side of the chest, the lower part of the patient's leg should be immediately examined. X-rays are the only way to confirm the diagnosis. However, if swelling and blueness of the skin are present it indicates that the disease is in an advanced stage and unfortunately it is then often too late for treatment.

One of the unpleasant after-effects of this disease has always been ulcers of the leg. Dr. Bauer states that from 80 to 90 per cent of leg ulcers which are thought to be due to varicose

(Continued on page 64)



FIRST...

for Mother's record



for Doctor's record

NESTLÉ'S . . . FIRST EVAPORATED MILK WITH 400 UNITS OF VITAMIN D_3 PER PINT



A great improvement in evaporated milk for infant feeding . . . since 25 *USP units of vitamin* D_3 are added to each fluid ounce of Nestlé's . . . offering *protection against rickets* . . . and *promotion of optimal growth.*

ACCEPTED AMERICAN MEDICAL ASSN Council on Foods and Nutrition

WISCONSIN ALUMNI RESEARCH FOUNDATION APPROVED FOR VITAMIN D UPON PERIODIC TESTS

SAFE, SURE, ADEQUATE SOURCE OF VITAMIN D

BLOOD CLOTTING (Continued)

veins are really caused by an earlier deep thrombosis. Heparin treatment clears up the infection in a few days and eliminates such painful and incapacitating developments in the future.

The author summarizes his suggested method of treatment in four steps: "(1) early diagnosis. (2) immediate intensive heparinization (by injection into the veins). (3) movements of the leg from the beginning, and (4) getting the patient out of bed the moment the acute thrombosis symptoms disappear, before the termination of heparin injections."

NICOTINIC ACID RELIEVES PATIENTS WITH SEVERE HEADACHES

Two New York physicians, writing in the May 11 issue of *The Journal of the American Medical Association*, report that nicotinic acid is highly effective for the relief of headaches of a persistent nature, such as migraine or severe idiopathic headaches which stem from an unknown cause.

Joseph W. Goldzieher, M.D., and George L. Popkin, M.D., from the New York City Hospital, Welfare Island, say that of 100 consecutive patients with severe headaches who received injections of nicotinic acid, 75 were completely relieved.

The patients had 100 milligrams of nicotinic acid in a salt solution injected into their veins. This was the standard dosage. In the average case from 30 to 45 seconds elapsed before the patient was aware of any effects, the doctors write. Then there was a feeling of warmth or heat with an accompanying flush. "Within three or four minutes the patient, though not comfortable, became accustomed to the heat, which gradually subsided in about 15 minutes and usually disappeared in 20 minutes to a half hour."

Nicotinic acid is a nutritional factor of the vitamin B complex, used in the treatment of acute pellagra — a vitamin deficiency disease. It is known to produce a dilatation of the blood vessels with an increase of blood flow to the brain.

Nicotinic acid has also been known to relieve malarial headache and sinus headache.





BOTH THE PHYSICIAN AND PATIENT APPRECIATE...

the unique combination of advantages in

MANDELAMINE

Reg. U. S. Pat. Off.
(Methenamine Mandelate)

- **PROMPT, EFFECTIVE ACTION**
  Disturbing urinary symptoms are usually alleviated within three to five days.
- **SAFETY**
  Virtual lack of toxicity facilitates therapy and eliminates need for selection of patients.
- **CONVENIENCE OF THERAPY**
  Supplementary acidification, restriction of fluid intake, dietary control, or other special measures are unnecessary.
- **WIDE RANGE OF THERAPEUTIC ACTIVITY**
  Remarkably efficient in the treatment of pyelonephritis, cystitis, prostatitis, and infections accompanying renal calculi or neurogenic bladder.

Mandelamine is supplied in enteric coated tablets of 0.25 Gm. (3¾ grains) each, in packages of 120 tablets sanitaped, and in bottles of 500 and 1000.



NEPERA CHEMICAL CO. INC.
21 Gray Oaks Ave.
Yonkers 2, New York
Please send me literature, and a physician's sample of Mandelamine.

Name.....M.D.

Street.....

City.....State.....

NEPERA CHEMICAL CO. INC.

Manufacturing Chemists Yonkers 2, New York

Your Advertisers

This is an index of those who serve the Medical Profession and support your journal. All advertisers are approved by your Journal Committee. It will help you to mention your Journal when writing them.

BODY SUPPORTS

J. E. Hanger, Inc., Chicago 5 68
Spencer, Inc., New Haven 7, Conn. 60

CLASSIFIED

Classified Advertisements 72

FOODS

Borden Company, 350 Madison Ave., New York 16
Campbell's Soup Co., Camden, N. J. 41
Coca Cola, Atlanta, Ga. 62
Knox Gelatin Laboratories, Johnston, N. Y. .....
Mead Johnson & Co., Evansville, Ind. .. Inside Back Cover
National Dairy Products Co., New York 17 10
Nestlé's Milk Products, Inc., 155 E. 44th St., New York 17 63
Wander Company, 360 N. Michigan Ave., Chicago .....

FINANCIAL AND INSURANCE

Medical Protective Co., Fort Wayne, Ind. 3
National Discount & Audit Co., New York 71
Physicians Casualty Co., Omaha, Neb. 67

PHARMACEUTICALS

Abbott Laboratories, North Chicago, Illinois 31
Ames Co., Inc., Elkhart, Ind. 71
Ar-Ex Cosmetics, Inc., 6 N. Michigan Ave., Chicago 2, Ill. 72
Ayerst, McKenna & Harrison Ltd., New York 16 13
Bristol Laboratories, Inc., Syracuse 1, N. Y. 34
Bristol-Meyers Co., New York .....
Burroughs Wellcome & Co., New York .....
Ciba Company, Summit, N. J. 23, 24, 25, 26
Commercial Solvents Corp., Terre Haute, Ind. 27
Crookes Laboratories, Inc., 305 E. 45th St., N. Y. .. 28
Otis E. Glidden & Co., Evanston .....
Gold Pharmacal Co., New York 68
Harrower Laboratories 30
Hoffman-LaRoche, Inc., Nutley, N. J. 49
Holland-Rantos Co., Inc., 551 Fifth Ave., New York ..
Hoosier Pharmacal Co., Indianapolis, Ind. .....
Hynson Westcott & Dunning, Charles and Chase Sts., Baltimore 56
International Vitamin Corp., 50 E. 42nd St., New York City .....
Irwin, Neisler & Co., Decatur, Ill. 42
Lanteen Medical Laboratories, Chicago 10 32
Thos. Leeming Co., 155 E. 44th St., New York 17 15
Lily, Eli & Co., Indianapolis, Ind. 38, 39, 40
Maltbie Chemical Co., Newark, N. J. 11
S. E. Massengill Co., Bristol, Tenn. 35
McNeil Laboratories, Inc., Philadelphia, Pa. 47
Merck & Co., Rahway, N. J. 14
Morris, Philip & Co., 119 Fifth Ave., New York 55
National Oil Products, Harrison, N. J. .....
Nepera Chemical, Yonkers, N. Y. 65
Nion Corporation, Los Angeles 38, Calif. 58
Num Specialty Co., Pittsburgh, Pa. 68
Parke, Davis & Co., Detroit, Mich. 21
Pitman-Moore Co., Indianapolis 6, Indiana 8
Rare Chemicals, Inc., Flemington, N. J. 29
Reed & Carnrick, Jersey City 6, N. J. 52
Rees Davis Drugs, Meriden, Conn. 48
Reynolds & Co., R. J., Winston-Salem, N. C. 20
Riedel-de Haen, Inc., New York City .....
Roche-Organon, Inc., Nutley, N. J. 12
J. B. Roerig & Co., 536 Lake Shore Drive, Chicago 6
Schenley Laboratories, Inc., N. Y. 1, N. Y. 7
Schering Corp., Bloomfield, N. J. 9, 61
Schmid, Julius, Inc., 423 W. 55th St., New York City .. 51
G. D. Searle & Co., P. O. Box 5110, Chicago ..... Inside Front Cover
Sharpe & Dohme, 11 N. Canal St., Chicago .....
Smith, Kline & French, Philadelphia 22
E. R. Squibb & Sons, New York 44
Frederick Stearns & Co., Detroit, Mich. 17
The Tarbonis Co., Cleveland 3, Ohio 50
Upjohn Co., Kalamazoo, Mich. 45
U. S. Standard Products, Woodworth, Wis. 33
Varick Pharmacal Co., 75 Varick St., N. Y. 13, N. Y. . 46
Walker Vitamin Products, Inc., New York 64
Wm. R. Warner & Co., 113 W. 18th St., New York . 4, 59
Warren-Teed Products Co., Columbus 8, Ohio 36
Whittaker Laboratories, Inc., New York City 37
White Laboratories, Inc. 5, 18, 57
Winthrop Chemical Co., 70 Varick St., New York 53
Wyeth Incorporated 19, 43
Zemmer Co., Pittsburgh, Pa. 72

PUBLISHERS

Caduceus Press, Ann Arbor, Michigan 37

SANATORIA AND SANITARIA

Costeff Sanatorium, Peoria, Ill. 70
Edward Sanatorium, Naperville, Ill. 70
Kenilworth Sanitarium, Wilmette, Ill. 69
Mitchell Farm, Peoria 69
Milwaukee Sanitarium, Wauwatosa, Wis. .... Back Cover
Norbury Sanatorium, Jacksonville, Ill. 68
North Shore Health Resort, Winnetka 70
Mary E. Pogue School, Wheaton, Ill. 71
Stokes Sanitarium, Louisville, Ky. 72
Weirick's Sanitarium, Elgin, Ill. 72

SCHOOLS

University of Illinois, Chicago 67

SURGICAL SUPPLIES

General Electric X-Ray Corp., 2012 W. Jackson Blvd., Chicago .....

RADIUM

Central X-Ray & Clinical Lab., 58 E. Washington St., Chicago 70
Physicians Radium Assn., 55 E. Washington St., Chicago 69

Books Received

The following books have been received for reviewing, and are herewith acknowledged. This listing should be considered as a sufficient return for the courtesy of the sender. Books that appear to be of unusual interest will be reviewed as space permits each month. Readers desiring additional information relative to books listed, may write the Editor who will gladly furnish same promptly.

ELECTROCARDIOGRAPHY IN PRACTICE: By Ashton Graybiel, M.D., Captain, Medical Corps U.S. Naval Reserve Co-ordinator of Research, U.S. Naval School of Aviation Medicine, Pensacola, Florida; and Paul D. White, M.D., Lecturer in Medicine, Harvard Medical School; Physician, Massachusetts General Hospital; with the assistance of Louise Wheeler, A.M., Executive Secretary, The Cardiac Laboratory, Massachusetts General Hospital; Conger Williams, M.D., Assistant in Medicine, Harvard Medical School and Massachusetts General Hospital. Second Edition. 458 pages, with 323 illustrations. Philadelphia and London: W. B. Saunders Company, 1946. Price $7.00.

CORNELL CONFERENCES ON THERAPY. Volume One. Edited by Harry Gold, M.D., Managing Editor, David P. Barr, M.D., Eugene F. DuBois, M.D., McKeen Cattell, M.D., Charles H. Wheeler, M.D., New York, The Macmillan Company, 1946. Price $3.25.

COSMETICS AND DERMATITIS: By Louis Schwartz, M.D., and Samuel M. Peck, M.D., Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, New York and London. Price $4.00.

A MALARIOLOGIST IN MANY LANDS: By Marshall A. Barber, with a foreword by Paul F. Russell. University of Kansas Press, Lawrence, Kansas, 1946. Price $2.50.

SYNOPSIS OF PATHOLOGY: By W. A. D. Anderson, M.A., M.D., F.A.C.P., Professor of Pathology and Bacteriology, Marquette University School of Medicine; Pathologist, St. Joseph's Hospital, Milwaukee, Wisconsin; Formerly Associate Professor of Pathology, St. Louis University School of Medicine. With 327 Text Illustrations and 15 Color Plates. St. Louis. The C. V. Mosby Company, 1946. Price $6.50.

THE MANAGEMENT OF FRACTURES, DISLOCATIONS AND SPRAINS: By John Albert Key, B.S., M.D., St. Louis, Mo., Clinical Professor of Orthopedic Surgery, Washington University School of Medicine; Associate Surgeon, Barnes, Children's and Jewish Hospitals; and H. Earle Conwell, M.D., F.A.C.S., Birmingham, Ala., Orthopaedic Surgeon to the Tennessee Coal, Iron and Railroad Company, Chairman of the Committee on Fractures and Traumatic Surgery of the American Academy of Orthopaedic Surgeons, etc., Fourth Edition. St. Louis, The C. V. Mosby Company, 1946. Price $12.50.

PREOPERATIVE AND POSTOPERATIVE TREATMENT: Edited by Lt. Col. Robert L. Mason, M.C.A.U.S., Cushing General Hospital, Framingham, Massachusetts, and

(*Continued on page 68*)

GENERAL REFRESHER COURSE

The University of Illinois College of Medicine is giving a refresher course in General Medicine for Veterans and Civilian physicians who are graduates of class A Medical schools. The course consists of lectures, ward walks, and small group clinics, and aims at teaching present day procedures useful in General Practice.

Tuition is $75.00 for three months for residents of the State of Illinois, $100.00 for non residents.

Address inquiries to the Dean,

UNIVERSITY OF ILLINOIS
College of Medicine, 1853 West Polk Street,
CHICAGO 12, ILLINOIS

IMPORTANT

Send changes of address to 30 N. Michigan Ave., Chicago 2, Illinois, enclosing label from a copy showing your old address. Changes received after the 1st of the month will not go into effect until the following month.

ACCIDENT - HOSPITAL - SICKNESS

INSURANCE

FOR PHYSICIANS, SURGEONS, DENTISTS EXCLUSIVELY



$5,000.00 accidental death $25 weekly indemnity, accident and sickness	**$8.00** Quarterly
$10,000.00 accidental death $50 weekly indemnity, accident and sickness	**$16.00** Quarterly
$15,000.00 accidental death $75 weekly indemnity, accident and sickness	**$24.00** Quarterly

ALSO HOSPITAL EXPENSE FOR MEMBERS, WIVES AND CHILDREN

86c out of each $1.00 gross income used for members' benefit

$2,800,000.00 INVESTED ASSETS — **$13,000,000.00 PAID FOR CLAIMS**

$200,000.00 deposited with State of Nebraska for protection of our members.

Disability need not be incurred in line of duty—benefits from the beginning day of disability

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION

43 years under the same management
400 First National Bank Building — OMAHA 2, NEBRASKA

The NORBURY SANATORIUM

JACKSONVILLE, ILLINOIS INCORPORATED and LICENSED

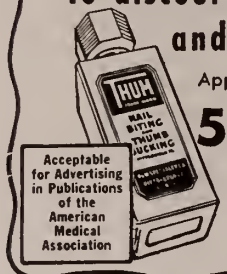
For the Treatment of Nervous and Mental Disorders

DR. ALBERT H. DOLLEAR, Superintendent
DR. FRANK GARM NORBURY, Medical Director
DR. SAMUEL N. CLARK, Physician
DR. HENRY A. DOLLEAR, Associate Physician
DR. FREDERICK A. CAUSEY, Associate Physician in Residence

Address Communications THE NORBURY SANATORIUM, Jacksonville, Illinois

RECOMMEND THUM TRADE MARK

to discourage thumb-sucking and nail biting



Apply like nail polish

50¢ at all drug-stores $1.00

Acceptable for Advertising in Publications of the American Medical Association

THUM TRADE MARK contains extract of capsicum (2.34%) in a base of acetone nail lacquer and isopropyl alcohol.

J. E. HANGER, inc.

1112 S. Michigan Ave. Chicago 5, Ill.
Phone Wab. 1135

1912 Olive St. St. Louis 3, Mo.
Phone CEntral 1088-1089

DURALUMIN AND ENGLISH WILLOW LIMBS
MECHANICAL ARMS
TRUSSES CANES CRUTCHES
INVALID CHAIRS

Illustrated Catalog Sent on Request

BOOKS RECEIVED (Continued)

Harold A. Zintel, M.D., Harrison Department of Surgical Research, University of Pennsylvania School of Medicine; Assistant Surgeon, Hospital of the University of Pennsylvania. Second Edition, Illustrated. Philadelphia and London. W. B. Saunders Company, 1946.

SHOCK TREATMENTS AND OTHER SOMATIC PROCEDURES IN PSYCHIATRY: By Lothar B. Kalinowsky, M.D., Research Associate in Psychiatry, College of Physicians and Surgeons, Columbia University; and Paul H. Hoch, M.D., Assistant Clinical Psychiatrist, New York State Psychiatric Institute and Hospital; Foreword by Nolan D. C. Lewis, M.D., Professor of Psychiatry, College of Physicians and Surgeons, Columbia University. Grune and Stratton, New York, 1946. Price $4.50.

CLINICAL LABORATORY DIAGNOSIS: By Samuel A. Levinson, M.S., M.D., Ph.D., Director of Laboratories, Research and Educational Hospitals, Chicago, Professor of Pathology, University of Illinois College of Medicine; and Robert P. MacFate, Ch.E., M.S., Ph.D., Assistant Director of Laboratories, Research and Educational Hospitals, Chicago, Assistant Professor of Pathology, University of Illinois College of Medicine. Third Edition. Lea & Febiger, Philadelphia, Pa., Price $10.00.

THE PHYSIOLOGICAL BASIS OF MEDICAL PRACTICE: A University of Toronto Text in Applied Physiology:

in whooping cough

ELIXIR BROMAURATE

GIVES EXCELLENT RESULTS

Cuts short the period of illness and relieves the distressing spasmodic cough. Also valuable in Bronchitis and Bronchial Asthma.

In four-ounce original bottles. A teaspoonful every 3 to 4 hours.

Prescribed by Thousands of Doctors

GOLD PHARMACAL CO. NEW YORK CITY

NERVOUS and MENTAL DISEASES

FOR MILD CASES *FOR SEVERE CASES*

MICHELL FARM — **MICHELL SANATORIUM**

Licensed by State of Illinois

George W. Michell, M.D., Medical Director

INFORMATION ON REQUEST

106 North Glen Oak Ave., Ph. 3-5179, Peoria, Ill.

Chicago Office:

46 East Ohio Street . . . Phone Delaware 6770



By Charles Herbert Best, C.B.E., M.A., M.D., D.Sc. (Lond.), F.R.S., F.R.C.P. (Canada), Professor and Head of Department of Physiology, Director of the Banting-Best Department of Medical Research, University of Toronto, and Norman Burke Taylor, V.D., M.D., F.R.S. (Canada), F.R.C.S. (Edin), F.R.C.P. (Canada), M.R.C.S. (Eng.), L.R.C.P. (Lond.), Professor of Physiology, University of Toronto. Fourth Edition. The Williams and Wilkins Company, Baltimore, 1945. Price $10.00,

THE CARE OF THE AGED (Geriatrics): By Malford W. Thewlis, M.D., Attending Specialist, General Medicine, United States Public Health Hospitals, New York City; Attending Physician, South County Hospital, Wakefield, R. I., Director, Thewlis Clinic; Special Consultant, Rhode Island Department of Public Health. Fifth Edition, Thoroughly revised with 65 Illustrations. St. Louis. The C. V. Mosby Company, 1946.

"My family thinks there's something wrong with me," a woman complained to the psychoanalyst, "simply because I like buckwheat cakes."

"But there's nothing wrong about liking buckwheat cakes," the doctor murmured, puzzled. "I like them myself."

"Oh, do you?" The woman was delighted. "You must come up some day. I have seven trunks full."

Radium Rental Service

By

THE PHYSICIANS RADIUM ASSOCIATION

Organized for the purpose of making radium available to physicians to be used in the treatment of their patients. Radium loaned to physicians at moderate rental fees, or patients may be referred to us for treatment if preferred.

●

The Physicians Radium Association

Room 1307—55 East Washington St., Pittsfield Bldg., CHICAGO 2, ILL.

Telephones: Central 2268-2269

Wm. L. Brown, M.D., Director

Kenilworth Sanitarium

Resident Staff
EDWARD J. KELLEHER, M. D.
Director
RICHARD D. HUFF, M. D.
Associate

Consultant Staff
THOMAS L. FENTRESS, M. D.
HARRY R. HOFFMAN, M. D.
SAMUEL H. KRAINES, M. D.
WILLIAM J. NOLAN, M. D.

A PRIVATE SANITARIUM FOR THE CARE AND TREATMENT OF MENTAL AND NERVOUS ILLNESSES, ALCOHOLISM AND DRUG ADDICTIONS

2228 BEECHWOOD AVE., WILMETTE, ILL.

Mailing address:
P. O. Box 600
Kenilworth, Ill.

Telephones
Wilmette 351
Wilmette 1662

Edward Sanatorium

NAPERVILLE, ILLINOIS
(30 miles west of Chicago)
Est. 1907 by Dr. Theodore B. Sachs

FOR THE TREATMENT OF TUBERCULOSIS

MEDICAL STAFF
Jerome R. Head, M.D.—Medical Director
Frank Seligson, M.D.—Medical Superintendent
Ideally situated — beautiful landscaped surroundings — modern buildings and equipment
A-A rating by Illinois Department of Health
For detailed information apply to—

Chicago Office of Edward Sanatorium
343 S. Dearborn St., Chicago
Wabash 8111

COSTEFF SANITARIUM
Mental and Nervous Disorders
Alcoholism and Drug Addiction

- **SHOCK TREATMENT** (Insulin, Metrazol Electro-shock) administered in suitable cases.
- **ARTIFICIAL FEVER THERAPY**

Home like environment, individual attention. MODERATE RATES.
Licensed by the State of Illinois
HARRY COSTEFF, M. D., Medical Director
1109 NO. MADISON AVE., PEORIA, ILL.
Phone 4-0156 Literature on request.

Radium Rental
Prompt Service
Deep X-Ray & Radium Therapy
Central X-Ray & Clinical Laboratory
A. Grossman, M.D., Director of Tumor Dept.
58 E. Washington St., Dear. 6960
CHICAGO, ILL.

LACK OF HEART PAIN IN NEGROES DECEIVING IN DIAGNOSIS

Coronary thrombosis, one of the leading causes of death in this country, is as common among Negroes as it is among white people, according to William S. Hunter, M.D., of Louisville, Ky. However, since the Negro rarely has pain it is not usually diagnosed as heart disease before death.

Writing in the May 4 issue of *The Journal of the American Medical Association*, Dr. Hunter says that "it seems likely that between 2,800 and 4,600 Negroes in the United States are killed every year by myocardial infarction [coronary thrombosis] and that many more are disabled by the condition."

Dr. Hunter, who is from the Departments of Internal Medicine and Pathology, the University of Louisville Medical School, suggests that the absence of pain may be due to the fact that high blood pressure had been found to be much more common and much more severe among Negroes than among white people. This condition probably causes an enlargement of the secondary



NORTH SHORE HEALTH RESORT
WINNETKA, ILLINOIS
on the Shores of Lake Michigan
A completely equipped sanitarium for the care of
nervous and mental disorders, alcoholism and drug addiction
offering all forms of treatment, including electric shock
Samuel Liebman, M.S., M.D.
Medical Director
FULLY APPROVED BY THE AMERICAN COLLEGE OF SURGEONS
225 Sheridan Road
Phone Winnetka 211

Social & Educational Adjustment

for exceptional children of all ages. Visit the school noted for its work in educational development and fitting such children for more normal living. Beautiful grounds. Home atmosphere. Separate buildings for boys and girls. Get catalogue.

The MARY E. POGUE SCHOOL

112 GENEVA ROAD WHEATON, ILL.
(NEAR CHICAGO)

arteries through which the blood is detoured to the heart muscle. Thus pain is eliminated for it occurs only when some part of the heart muscle is deprived of its necessary blood supply.

Coronary thrombosis is usually associated with prolonged pain and with permanent damage to the heart during attacks. There is always shortness of breath and there may be some coughing because of water accumulating in the lungs as a result of the impaired circulation. Also present is a rapid and irregular pulse and a fall in blood pressure.

Public health has developed to the point where it has become apparent that many diseases cannot be controlled without full citizen understanding and participation. The provision of x-ray and diagnostic facilities, senatoria, and rehabilitation services will not reduce tuberculosis unless people know the value of an x-ray of the chest, have one taken periodically, and take the necessary treatment if a diagnosis of tuberculosis is made. Mayhew Derryberry, Ph. D. Pub. Health Rep., Nov. 23, 1945.

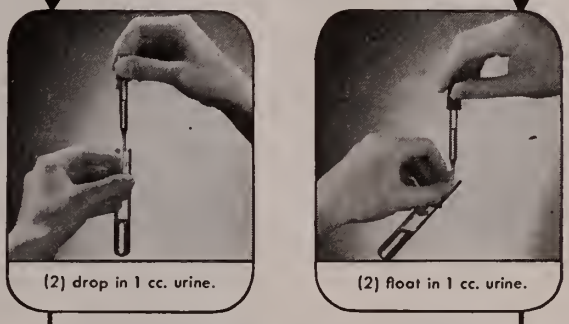
The accumulated unpaid patients' bills remain dormant until the satute of limitations erases them as an asset. If you wish to have those accounts collected without offending the patient, write.

NATIONAL DISCOUNT & AUDIT CO.
Herald Tribune Bldg.
New York 18 N.Y.



ALBUMINTEST

Simple, Convenient Tablet Test
For Qualitative Detection of Albumin
NONPOISONOUS NONCORROSIVE
NO HEATING
Adapted to both
TURBIDITY and RING
methods of testing



Quick, reliable, conveniently carried Albumintest is designed for use by physicians, laboratory technicians and public health workers.

Bulk solutions may be made up in any quantity.

Economical in bottles of 36 and 100. Order from your dealer



A companion to Clinitest—Tablet Method for Urine-Sugar Analysis

AMES COMPANY, Inc., Elkhart, Indiana

ZEMMER

Solution ISO-PHEDRIZEM Zemmer

Ephedrine Sulfate 1%
Chlorobutanol (Chloroform Derivative) ..... ½%
Sodium Chloride q.s. to make an Isotonic Aqueous Solution.
An Isotonic Solution for the treatment of congested nasal passages.
Supplied in 1 pint, 1 ounce dropper bottles and ½ ounce dropper bottles.
Literature and prices on request.

THE ZEMMER CO., Oakland Sta., Pittsburgh 13, Pennsylvania

IL-646

MORPHINE AND OTHER DRUG ADDICTIONS

Selected patients who wish to make good and learn how to keep well; methods easy, regular, humane. Dr. Weirick's Sanitarium, Elgin, Ill.

THE STOKES SANITARIUM 923 Cherokee Road, Louisville, Kentucky

Our **ALCOHOLIC** treatment destroys the craving, restores the appetite and sleep, and rehuilds the physical and nervous condition of the patient. Liquors withdrawn gradually, no limit on the amount necessary to prevent or relieve delirium.

MENTAL patients have every comfort that their home affords.

The **DRUG** treatment is one of gradual Reduction. It relieves the constipation, restores the appetite and sleep; withdrawal pains are absent. No Hyoscine or rapid withdrawal methods used unless patient desires same.

NERVOUS patients are accepted by us for observation and diagnosis as well as treatment.

E. W. STOKES, Medical Director, Established 1904.
Telephone—Highland 2101

Nellie bought a brand-new dress,
'Twas flimsy and quite thin.
She asked me how I liked it
And I answered with a grin:
"Wait till the sunshines, Nellie!"

Classified Ads

RATES FOR CLASSIFIED ADVERTISEMENTS—For 30 words or less: 1 insertion, $3.00; 3 insertions, $8.00; 6 insertions, $14.00; 12 insertions, $24.00; from 30 to 50 words: 1 insertion, $4.00; 3 insertions, $10.50; 6 insertions, $20.00; 12 insertions, $30.00. Extra words: 1 insertion, 10c each; 3 insertions, 25c each; 6 insertions, 40c each; 12 insertions, 50c each. A fee of 25c is charged for those advertisers who have answers sent care of the Journal. Cash in advance must accompany copy.

FRIEDMAN PREGNANCY TESTS require only 48 hours. Write for mailing tube and vial. Established 1938. Price $5.00. Pregnancy Diagnostic Laboratories, H. S. Lames, D.V.M., Dysart, Iowa.

3/47

WANTED: Residents in psychiatry, $1800 to $2400 a year; public health physicians, $3720 to $4320 a year; physicians, $3720 to $4320 a year; tuberculosis control physicians, $4320 to $5280 a year; psychiatrists, $4320 to $5280 a year; clinical directors, $5280 to $5940 a year. Illinois Dept. of Public Welfare, 176 W. Adams St., Chicago 3, Illinois.

WANTED: Laboratory helpers, $1260 to $1840 a year; laboratory technicians, $1560 to $1980 a year; laboratory technicians, $1800 to $2400 a year; x-ray technicians, $2100 to $2640 a year. Illinois Dept. of Public Welfare, Chicago 3, Illinois.

SHOULDER AND ARM PAIN OF SCALENUS ANTICUS ORIGIN

W. Craig Hendricks, M.D., Brookville, Pa.
In THE PENNSYLVANIA MEDICAL JOURNAL, 49;6;616
March, 1946
Surgery vs. Physical Medicine

A review of the literature leaves the impression that surgical section of the scalenus anticus is the only treatment for this condition. There is no doubt such an operation is successful, but most of these people need not come to surgery; the majority can be cured by the methods to be set forth. They are available to practically every general practitioner, and certainly conservative treatment should be used first. Its aim is to relax scalenus anticus spasm by attacking in three ways: First is local heat, infra-red rays, or diathermy; and low-wave frequency seems the most efficient. Second, lifting the shoulder by a sling, figure-of-eight bandage, or aeroplane splint. Third, Reichert's three pillow arrangement, which is an ingenious method as illustrated. With the patient on his back, it brings the head and shoulders forward. With the patient lying on the bad side with his shoulder on the mattress, a thick pillow is placed between head and mattress to prevent the head rotating toward the bad side. If he lies on the good shoulder, a pillow is placed under the bad elbow and forearm to elevate the affected shoulder.

Novocaine injection of the anterior scalene was mentioned as a diagnostic aid; it is also excellent treatment, and repeated injections will cure many cases.



LEG MAKE-UP FOR THE *ALLERGIC PATIENT*

3 SHADES
- PEACHGLOW (LIGHT)
- RIO (MEDIUM)
- SUNGLOW (DARK)

AR-EX COSMETIC HOSE contains no rosin, aniline dyes, or other known skin irritants. Goes on smoothly, does not rub off, but is easily removed with soap and water. *Send for Free Formulary.*



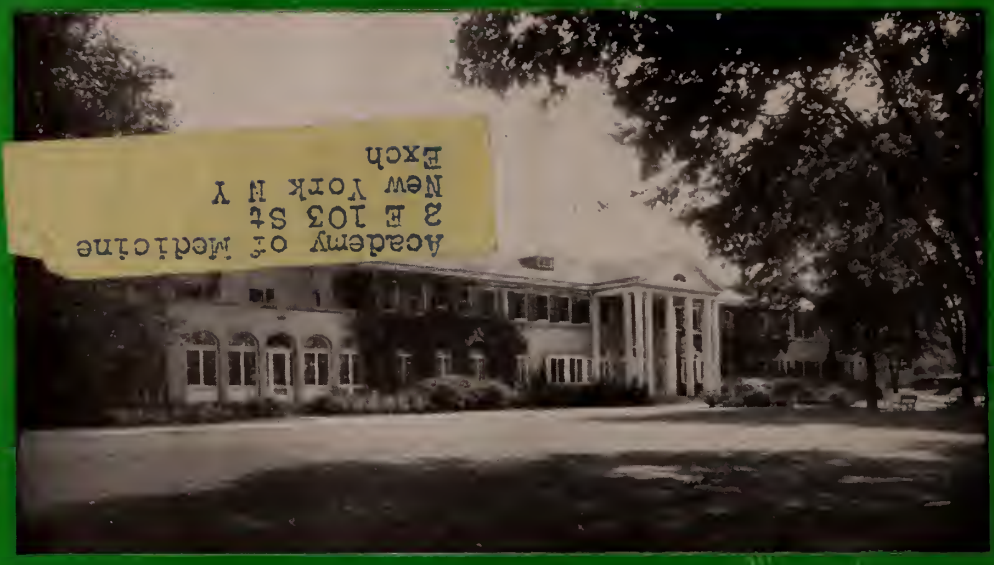
FREE FORMULARY

DR._____
ADDRESS_____
CITY_____
STATE_____

AR-EX COSMETICS, INC. 1036 W. VAN BUREN ST. CHICAGO 7, ILL.



COPYRIGHT, 1945, MEAD JOHNSON & CO.
EVANSVILLE, INDIANA, U.S.A.



COLONIAL HALL
One of the 14 Units in "Cottage Plan"

FOR NERVOUS DISORDERS

MAINTAINING the highest standards for more than a half century, the Milwaukee Sanitarium stands for all that is best in the care and treatment of nervous disorders. Photographs and particulars sent on request.

Josef A. Kindwall, M. D.
Carroll W. Osgood, M. D.
William T. Kradwell, M. D.
Merle Q. Howard, M. D.
Lewis Danziger, M. D.
Russell C. Morrison, M. D.
Arthur J. Patek, M. D.

G. H. Schroeder
Business Manager

MILWAUKEE SANITARIUM

WAUWATOSA—WISCONSIN

PHYSICIAN'S CHICAGO OFFICE—1117 Marshall Field Annex—Wednesdays, 1-3 P.M.—Central 1162

The New York Academy of Medicine

THIS BOOK MUST NOT BE RETAINED FOR LONGER THAN ONE WEEK AFTER THE LAST DATE ON THE SLIP UNLESS PERMISSION FOR ITS RENEWAL BE OBTAINED FROM THE LIBRARY.

MAR 9 - '48	AUDIO-PROD.	